DRUG & COSMETIC INDUSTRY

NOVEMBER, 1950

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FRANCIS CHILSON, Production Consultant
MILTON A. LESSER, Technical Editor
HARRY G. KELBLY, Raw Material Editor
FRANK CHILD III, News Editor
HILDA C. McCOLLOM, Art Director

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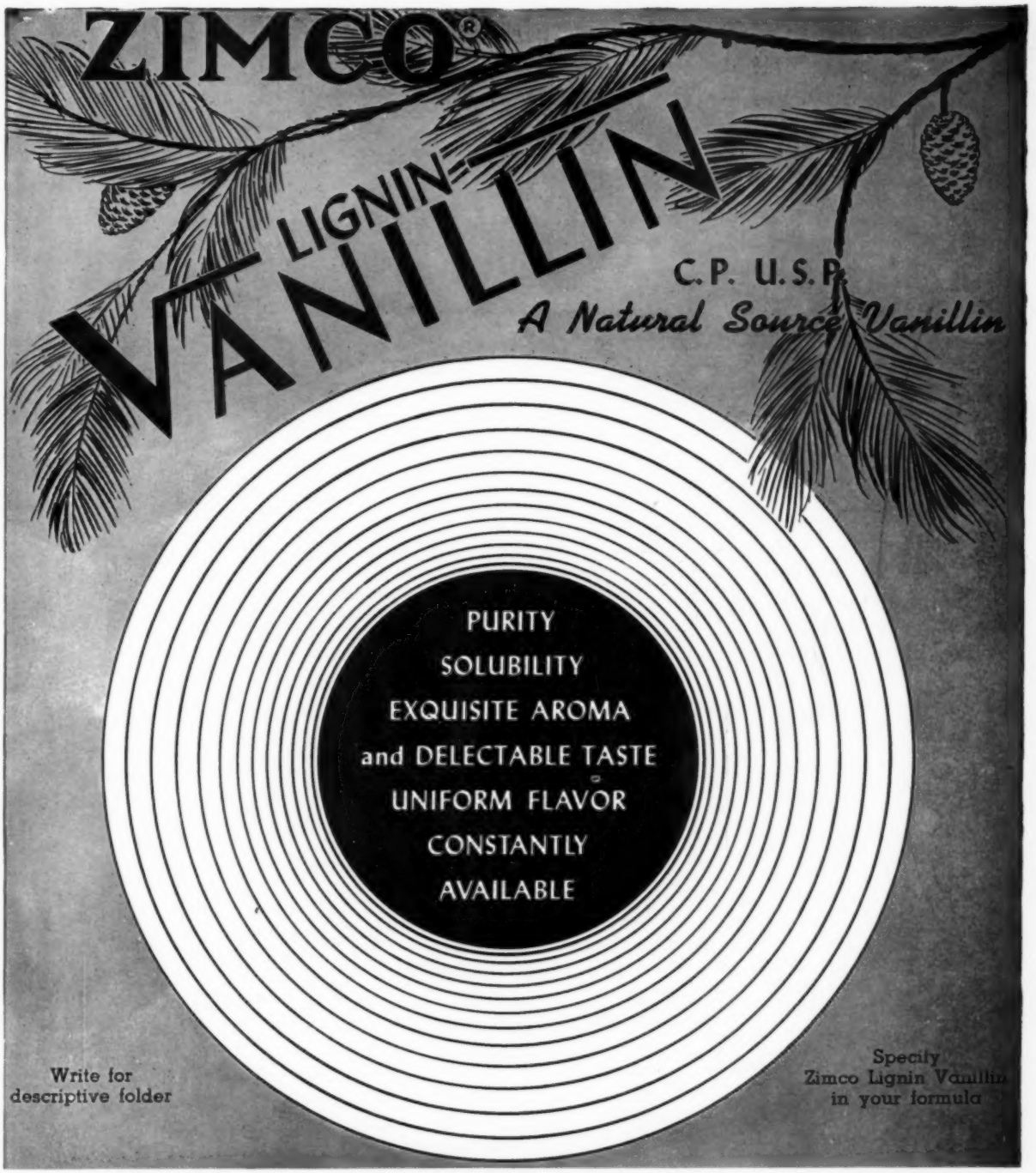

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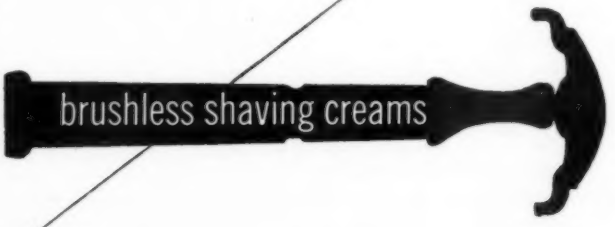

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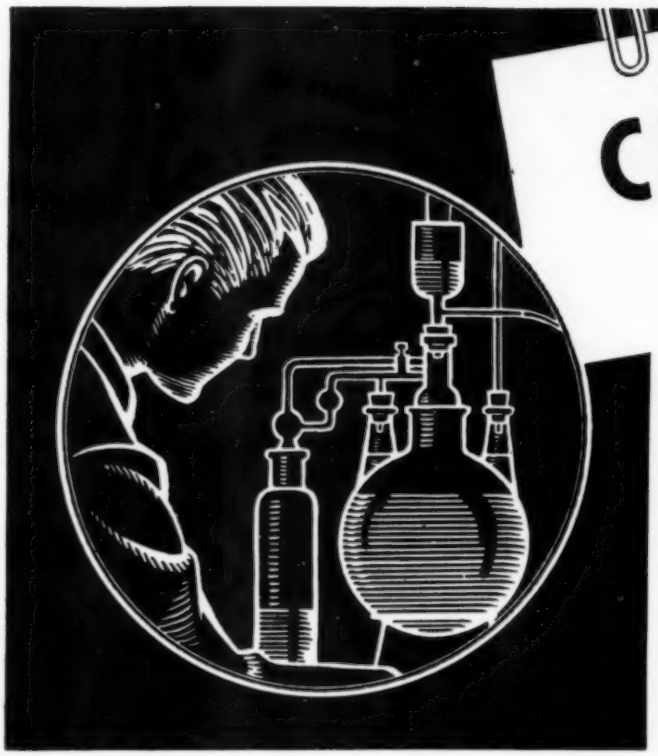

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The other Monday morning we had our usual weekly powwow – all departmental heads present or accounted for. Of course the usual snake-in-the-grass had to raise its head just when things were going nicely – how to move orders faster through the plant. And of course, as usual, it was "lab and plant control" that got the blame. So, once again we rehearsed step by step the average twenty-odd (?) controls entering into the production of average products.

All were carefully studied. Could any of them be dropped? Or doubled up? Could re-routing save time? Then the subject of special controls for special products was hashed and re-hashed.

"In fact" said Mike, "Control 124-G-8 should be transferred from Special Group Control to Regular Group Control."

He was greeted by a chorus of boos. Why add more red tape? It's red tape that's tying us in knots!

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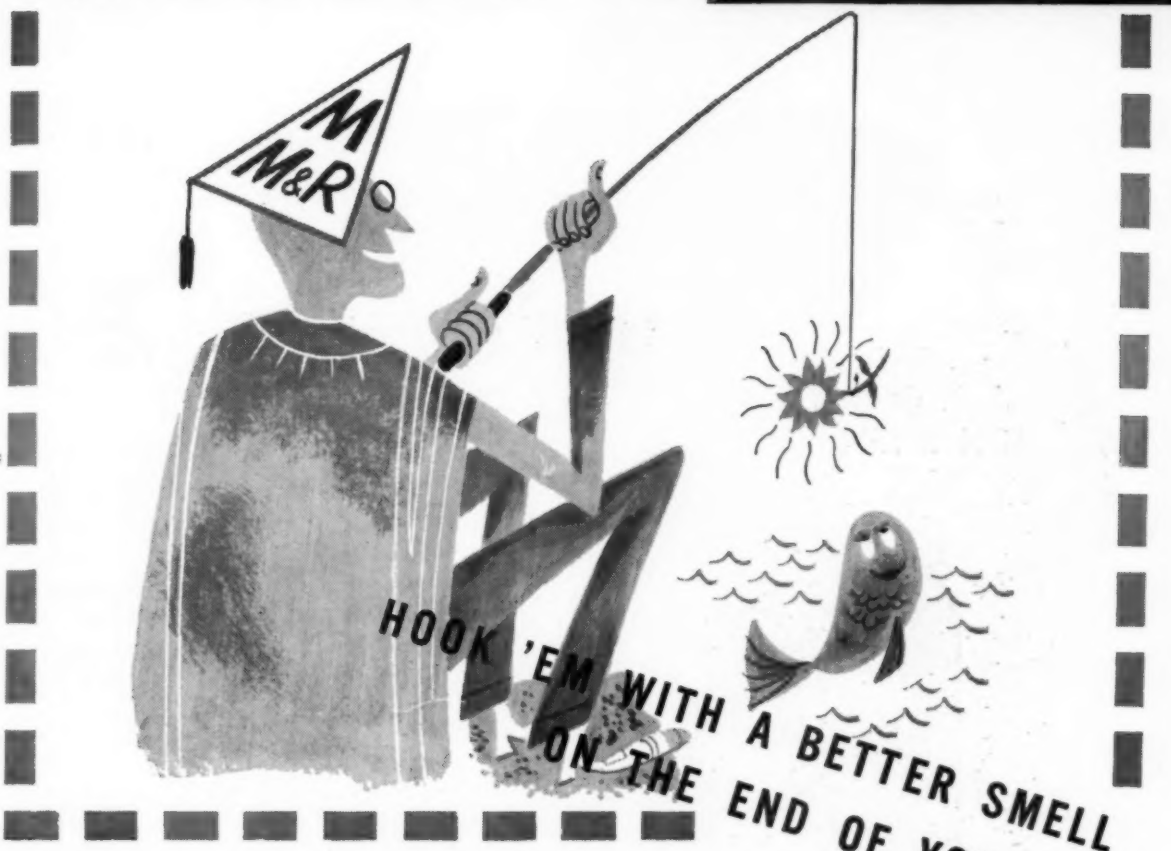

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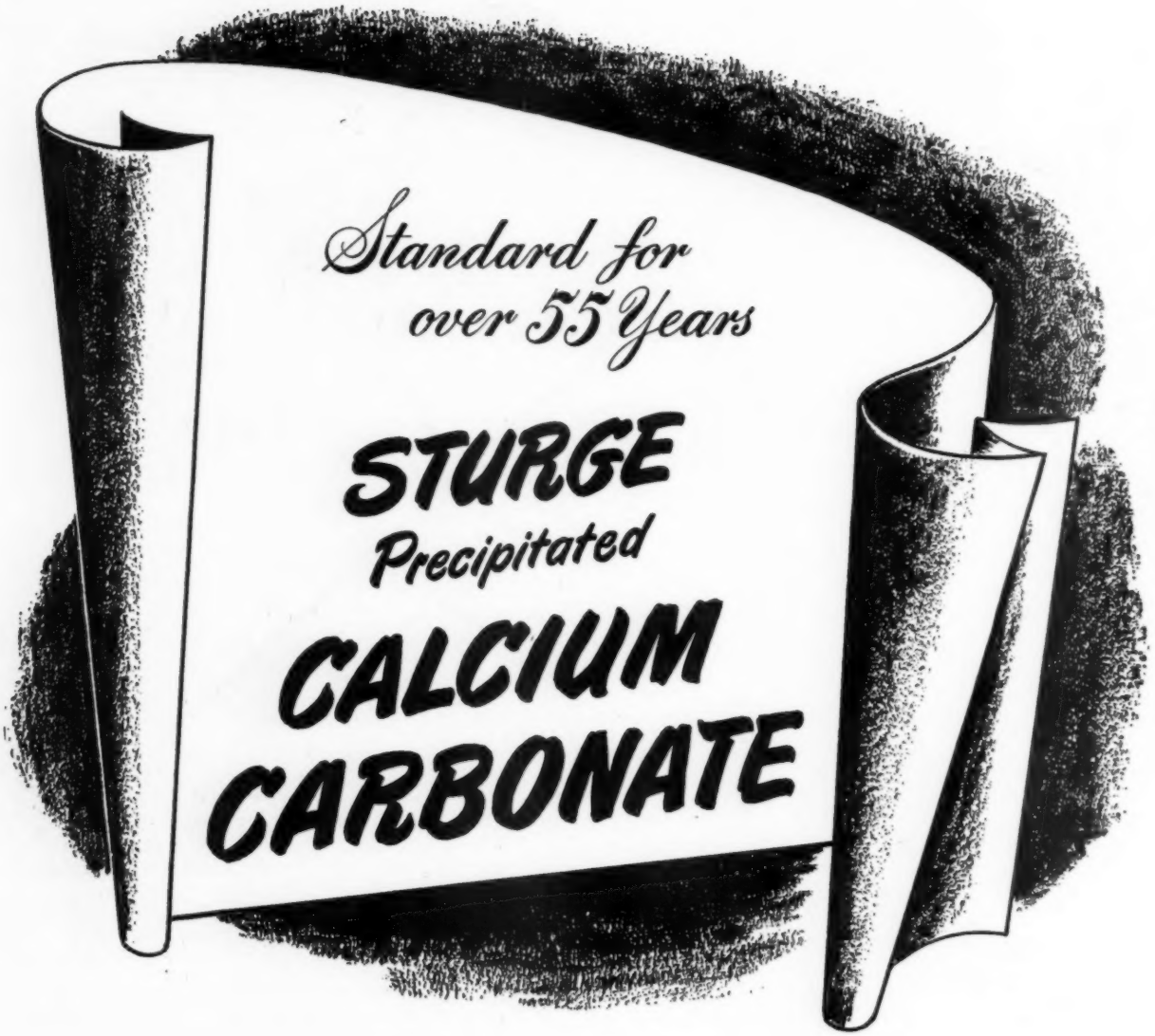

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Cloud Point °F	38° 42°	46°- 49°	63° - 71°
Color Lovibond 1" Red	4 - 7	4 7	4 7
Color Lovibond 1" Yellow	20 - 40	20 - 40	20 - 40
Unsaponifiable Per Cent	2.0- 3.0	2.0- 3.0	1.5 - 2.5
Saponification Value	196 -199	196 -199	197 - 200
Acid Value	195 -198	195 -198	196 - 199
%F.F.A. as Oleic Acid	98 - 99.5	98 - 99.5	98.5-100.0
Iodine Value	90 - 93	88 - 91	80 - 85

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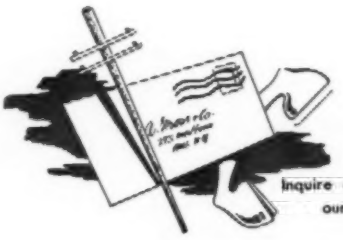

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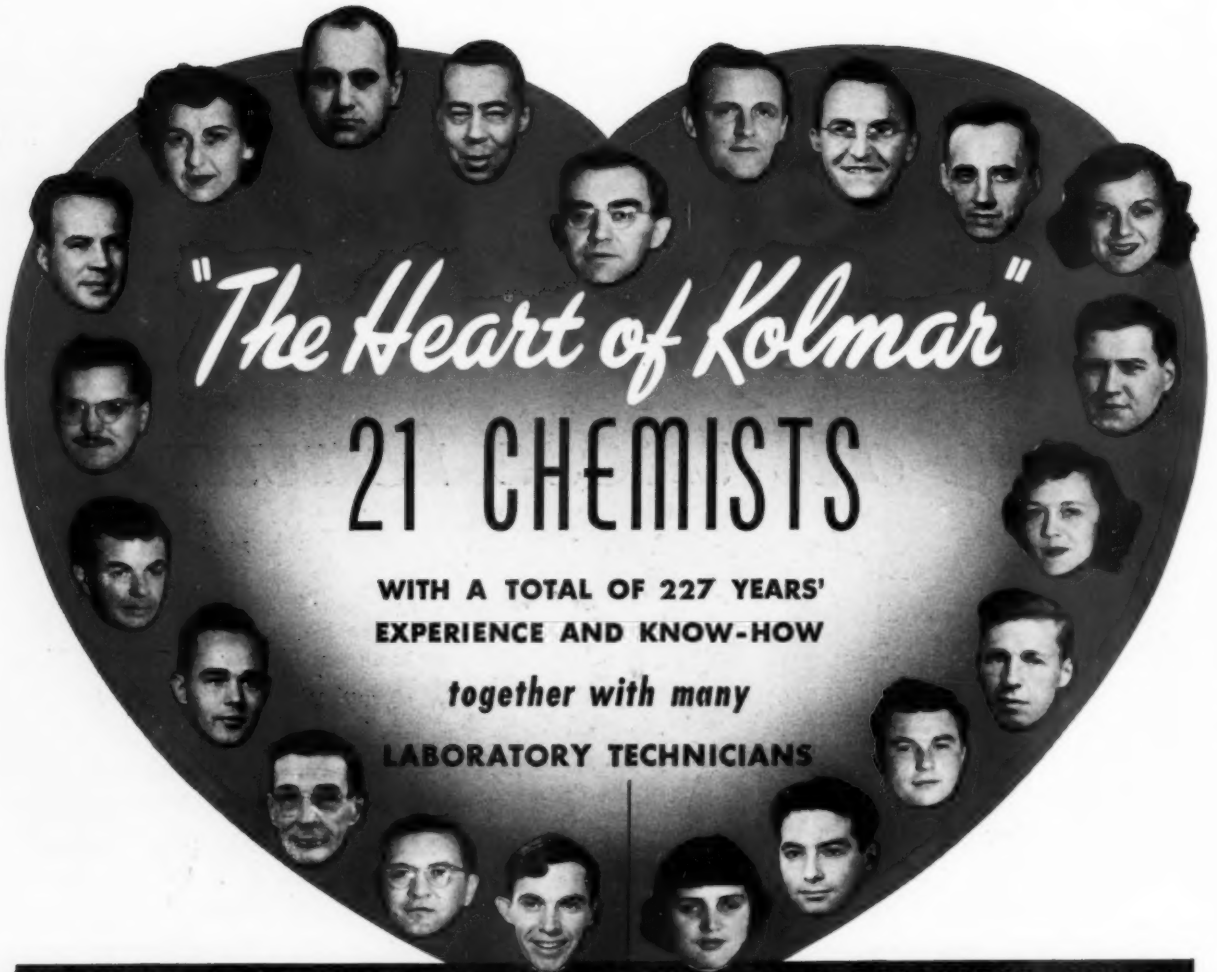
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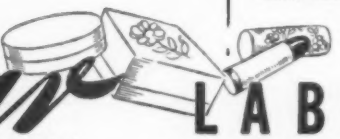

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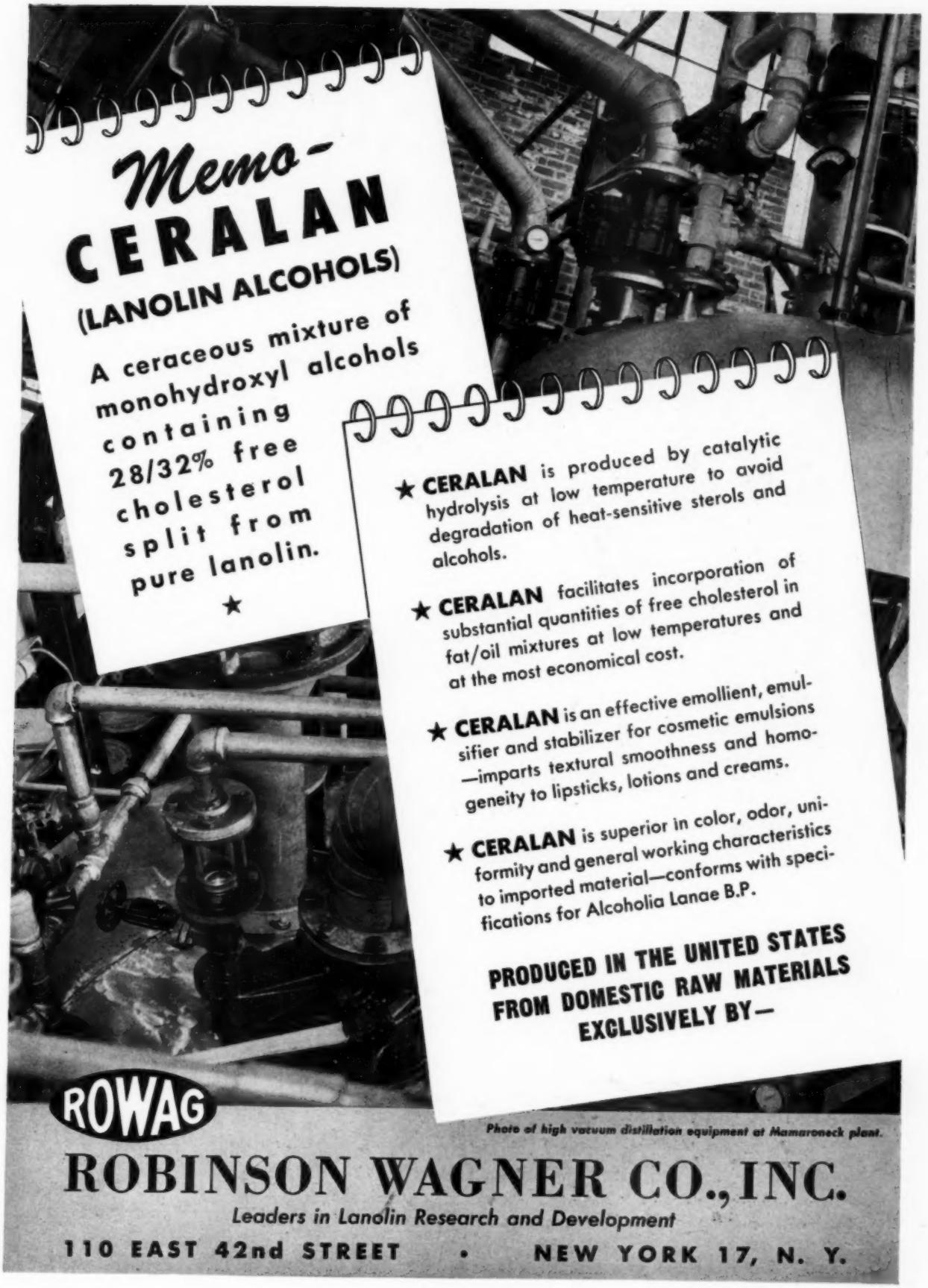

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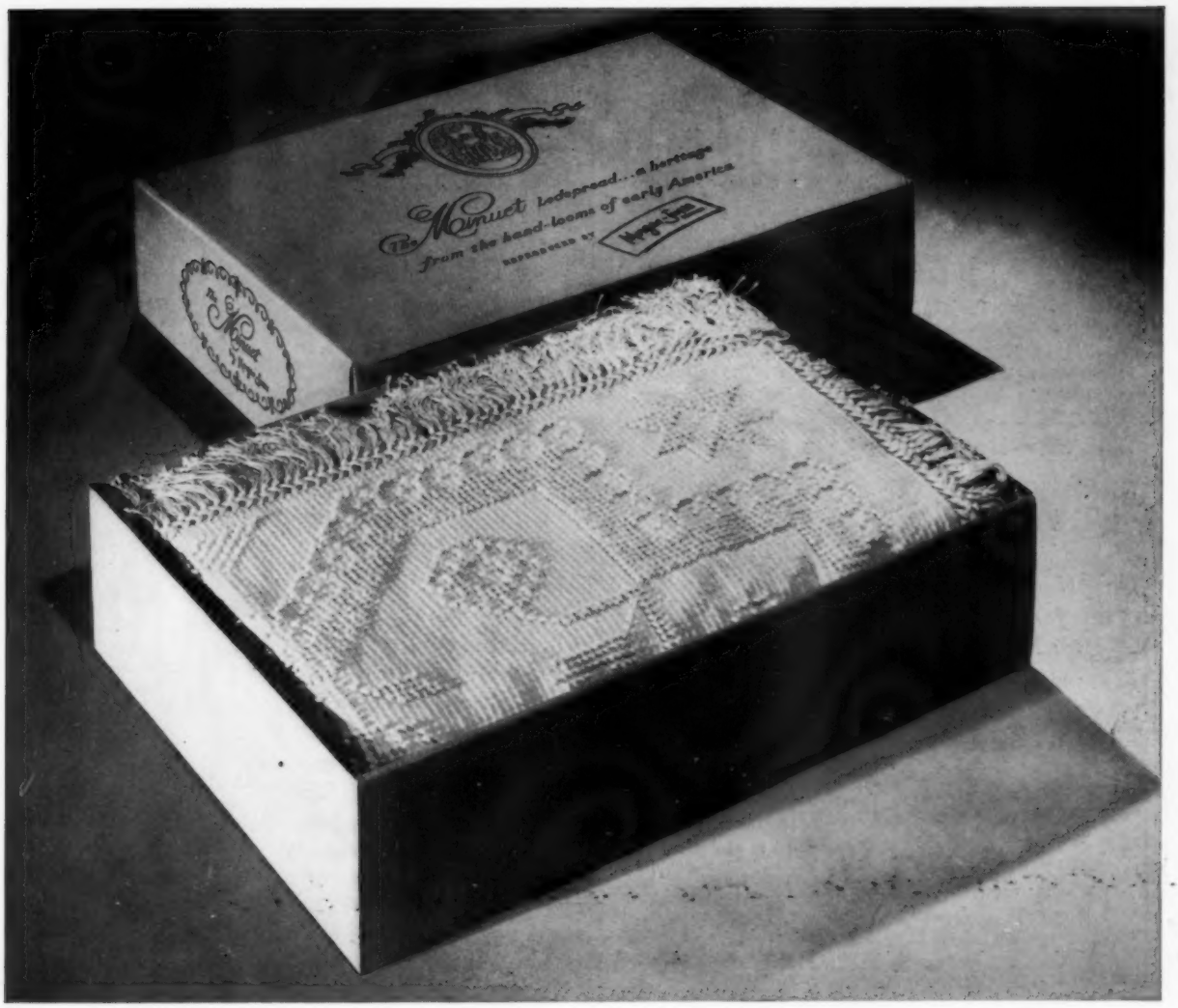

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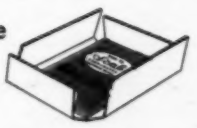

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I want a job selling perfumes and cosmetics.

I know the cities and towns where these products are sold in worthwhile volume, where all the capable, energetic retail sellers of cosmetics are located, and where the sales expense of calling will return a profit.

When I enter the store of any of these retailers, I am sure of a welcome based on long, friendly associations. I know the folks who do the buying; more important I know the folks who do the selling. I know how to get the attention of these folks, how to get my story over without stepping on anyone's toes.

I want to do more than just send you an order which would only mean that your goods are at rest in that store. I like to sell and my idea of selling is to keep your goods moving through the store to Miss and Mrs. Public.

I would expect you to give me a clear, concise story of your product—its quality, competitive advantages and selling points. I would need to know your advertising program, so that I can build up in the mind of these retail folks the expectation of substantial consumer interest. I want also to know about your company policies so that I can win friendly admiration for your products and your company.

I can sell perfumes and cosmetics because I know the people who in turn sell them to the public.

Let me carry the kind of message which encourages retail display for your product and friendly, informed selling behind the counter and you will soon see results in increased retail orders.

I have been selling perfumes and cosmetics for over 33 years. Any good retailer will give you a reference.

My name is BEAUTY FASHION:

Do you need a top-notch, tested, retail salesman?

"I somehow don't think it's Your shade!"

KEEPING POSTED

Lacking in Health Insurance

"THREE LACKS" at present existent in voluntary health insurance plans sponsored by the A. M. A. and its component state and county societies, are no trying to be remedied by organized medicine, A. M. A. Board of Trustees Chairman Dr. Louis H. Bauer told the Chamber of Commerce of the State of New York last month. These three deficiencies are:

1. Individual enrollment instead of group enrollment.
2. Protection for people over sixty-five years of age.
3. A policy against financially catastrophic illness, that is, the person who is ill for a long period of time with a chronic illness.

The first two of these phases of additional coverage are now rapidly coming into effect, said Dr. Bauer, nearly all plans now offering individual enrollments and also allowing a man to stay in the plan as long as he lives, thus eliminating the sixty-five year termination of the insurance upon retirement. As to the third deficiency, Dr. Bauer said that this is being worked on now, commenting: "The California Physicians' Service is the first to come out with such a policy, and that came out several months ago, in which a person can be protected against a long-duration illness which to him is catastrophic financially. We hope that within the next year or two all other companies, both nonprofit and commercial, will follow suit. When we have that, I think we will have the voluntary program in pretty good order."

Nearly 70 million people are now enrolled in Blue Cross hospitalization insurance plans, said Dr. Bauer, "and we feel that there will probably be 90 million enrolled." Nonprofit voluntary medical care insurance plans backed by the medical societies have now reached a total enrollment of 17 million people, and they, together with the various types of plans, through industry and labor and commercial plans, now cover about 50 million people, he said. "There are 24 million right now who are receiving their medical care in whole or part from the Government. That includes most of the veterans," said Dr. Bauer. In addition, he declared, "there are 10 million people who are financially fixed so that they don't care whether they have insurance or whether they don't. There are another 10 million people who are not interested in medical care; that is, they would rather buy it over a drug store counter or consult a cultist. That is their business. Then there are at least 5 million indigent for which compulsory health insurance bills make no provision whatever, unless the state is willing to pay additional taxes to support them." When all these figures are added to the 90 million expected to be enrolled in the voluntary hospital and medical care plans, Dr. Bauer said, "you come pretty close to having the entire population of the country."

Cosmetic Chemists' Program

THE Society of Cosmetic Chemists has scheduled the following papers for presentation at its annual technical meeting to be held December 5 at the Biltmore Hotel, New York: "Colloidal Magnesium Aluminum Silicate and Its Uses in Cosmetics," Mrs. B. Tarnoff, R. T. Vanderbilt Co.; "Experiences with and Consideration of the Human Patch Test Method," Dr. Herman A. Shelanski, Industrial Toxicology Laboratory; "A Method for Testing the Degerming Efficiency of Hexachlorophene Soap," Dr. Arthur R. Cade, Sindar Corporation; "Current Literature Sources for the Cosmetic Industry," Gertrude Schutze, Bristol-Myers Company; "Use of Lactobacillus Counts in Caries Control," Dr. Philip Jay, University of Michigan School of Dentistry; "Swelling Studies on Single Hair Fibers," Milton Eckstrom, Raymond Laboratories; "A New Quantitative Method for the Evaluation and Study of Shampoos," G. Barnett and Dr. D. H. Powers, Richard Hudnut; "Pressure Packaging of Cosmetic Products," Earl Graham, Crown Can Company.

The 1950 Society Medal Award for contributions to the art and science of cosmetics will be bestowed on Dr. Eric C. Kunz, at the dinner to be held on the evening of the same day.

The Pituitary and Health

FURTHER recognition of the importance of the pituitary gland in the maintenance of health was revealed in a talk given by Dr. Hans Selye, professor and director of the Institute of Medicine and Experimental Surgery, University of Montreal, before the fourth General Assembly of the World Medical Association in New York last month. He described the pituitary and the adrenal glands as veritable balance wheel of life, and said that studies have provided the first important clues to the understanding of the mechanism underlying such serious and baffling diseases as high blood pressure, diseases of the kidneys and blood

vessels, rheumatic diseases and may other ills. These clues are expected to lead to new approaches to the treatment of disease in general by stimulating and building up the body's general defensive mechanism, in addition to specific measures. Such stimulation of the general defensive agencies, found to be regulated by the pituitary-adrenal system, is expected further to lead to the control of maladies for which no specific cause is known.

T.G.A. Scientific Program

A SYMPOSIUM on olfaction is to occupy the afternoon session of the meeting of the Scientific Section of the toilet Goods Association to be held December 6, at the Waldorf-Astoria Hotel. Edward Sagarin, Givaudan-Delawanna, will open the session with a paper titled "Toward Scientific Method in the Study of Olfaction;" James Middleton will follow with "A Critical Review of Theories of Olfaction;" next will be Joseph Hersh, M.D., on "The Effect of Pathology and Surgery on the Sense of Smell;" then Dr. Bernice M. Wenzel, Department of Psychology, Barnard College on "Practical Applications of Olfactometry;" and finally Dean Foster, Ph. D., Director Olfactory Research Laboratory, Joseph Seagram Sons, on "Future Pathways of Olfactory Research."

Papers at the morning session will include "The Pilot Plant—Part II; the Equipment and Its Applications in Drug and Cosmetic Development," P. C. Wieseman, Norwich Pharmacal Co.; "Some Aspects of the Mechanical Behavior of Hair," Walter J. Hamburger, Henry M. Morgan and Milton M. Platt, Fabric Research Laboratories; and "The Pharmaceutical Properties of the Kaloins," A. Halpern, J. V. Powers and C. H. Bradney, Research Laboratories of E. Fougera & Co.

Proprietary Drug Sales

COUGH and cold remedies lead sales proprietary products sold over the counter with 24.6 per cent of the total volume of such products as distinguished from ethical preparations prescribed or handled by the physician, according to Modern Medicine. Vitamins stand in second place with 23.1 per cent, followed by laxatives and carthartics 15.3 per cent, internal analgesics 14.2 per cent, tonics and alteratives 6.9 per cent, external analgesics 3.9 per cent, stomach sweeteners 4.1 per cent, all others 7.9 per cent.

Cortisone Price Again Reduced

MERCK & Co. has made a further reduction in the price of Cortone, its brand of cortisone, which is now selling at a suggested price of $35 per gram to physicians. This is a reduction from the price of $50 per gram which was in effect for only a few months, this $50 price representing a cut from $95 a gram in effect at that time. Thus the price of this important drug is now less than one-fifth of that charged to investigators a little over a year ago. Furthermore, in rheumatoid arthritis, where prolonged treatment with the product is usually required, clinical investigations now indicate that almost all patients can be maintained on one-tenth of a gram a day, while some can be maintained on as little as one-twentieth of a gram a day. Cortone was made generally available through distributors, hospitals, institutions, and pharmacies for use by the physician early this month.

Claims for Vitamin-Mineral Products

FEDERAL agencies charged with regulation of labeling and advertising of food and drug preparations are changing their opinions regarding claims allowable, particularly in advertising, for vitamin-mineral combinations. They contend that a very high percentage of the statements made regarding vitamin-mineral deficiencies are based upon a booklet published by the U. S. Department of Agriculture which gives the results of a survey conducted prior to 1937. They contend further that this survey can no longer be regarded as authoritative under today's conditions for the reason that when the survey was conducted, the purchasing power of the average American was low and therefore the nutritional level was below normal standards. Further, they claim that more recent surveys reveal that vitamin-mineral deficiencies are in a lower ratio than previously, except in cases of chronic alcoholism in which food consumption is low. The average American diet does supply the minimum daily requirements for vitamins and minerals, in their opinion.

As opposed to these views it is said that the Federal agencies have not considered the fact that while the purchasing power may be high, and types of foods that should supply the required amount of vitamins and minerals may be purchased, experience and tests have shown that food raised in certain types of soil, or handled or prepared in a certain manner may lose part of the vitamin-mineral content. Therefore the purchaser may have what appears to be a normal diet, capable of supplying proper amounts of vitamins and minerals, and yet a deficiency of some of these substances may exist.

Members of these agencies state that a deficiency in iron will result in a simple or nutritional anemia, and that products supplying a sufficient quantity of iron will be of value in treating such uncomplicated cases of anemia. They also admit that iron is of value in enriching the hemoglobin content of the red blood cells in those instances where there is an iron-deficiency anemia. It is also admitted that vitamins and minerals, along with other food elements, are essential in assisting in repairing nerve tissues, as well as other tissues of the body. Therefore they are essential in maintaining good health. But they claim that only a small percentage of the population needs to be assisted by taking vitamin-mineral preparations, since their diet does furnish the essential quantities of these substances. They also claim that vitamin D is the only vitamin that is absolutely essential in conjunction with minerals, and that many of the vitamin-mineral combinations on the market do not include vitamin D. Many are of the opinion that, to a lesser degree, vitamin C is also important in this field.

A. M. A. and Cosmetics

THE American Medical Association's publication for the layman, "Today's Health," formerly known as "Hygeia" asks, "Are cosmetics harmful?" and then announces that:

"A new series of articles will bring to our readers an accurate authorative analysis of the value and effect of cosmetics—physically, not esthetically. This will be of vital importance to all users, as the market is flooded with all types of preparations promised to do this or that for your beauty, your skin, your body and your hair. What are the honest facts in the matter, proven by adequate laboratory tests?"

Brand Names Listed

IN A REFERENCE book listing 2,438 brand name products made by members of the Brand Names Foundation, 261 famous names of drugs and drug store products are listed. Brand names in food and grocery products top classifications in the book with 634, followed by the apparel field with 400, household furnishings with 304, automotive products with 308, and industrial supplies and materials with 291. The roster lists 271 different types of products. With the publication of this first reference book published by the Foundation, announcement is made that revised editions will be published several times a year.

"Ravens" Confusing With "Black Crows"

"RAVENS" as a trade-mark was held to be confusingly similar to "Black Crows" by the Commissioner of Patents on the basis that confusion may result from similarity in sound, appearance or meaning and prior decisions as to similarity of marks are seldom controlling, since minor differences and facts may result in a different conclusion. Opposition in 1946 to registration of the mark was not dismissed for laches although the opposer knew of the applicant's use of the mark since 1937, but did not object to such use because the applicant's sales were considered neglible and applicant offered no evidence as to extent of sales. No facts indicating acquiescence or estoppel other than mere lapse of time without objection were presented, and a mere delay ordinarily is not sufficient to constitute laches barring assertion of trade-mark rights. An opposer could take no action until the application was filed and the mark published for opposition. An opposer is not required to prove confusion between marks.

"Suave" and "Swav"

THE trade-mark "Suave" to describe a hair dressing, was held by the Court of Customs and Patent Appeals to be confusingly similar to "Swav," a shaving cream. In the opinion of the court the fact that a hair dressing is sold only through beauty parlors does not eliminate the likelihood of confusion, since both hair dressing and shaving cream are toilet articles and hair dressing is adaptable for sale through the same channels as shaving cream. The question is not one of confusion between the goods as such, but likelihood of confusion as to the source of the goods.

"Care" and "Kare"

THE trade-mark "Care" describing a mixture of ingredients having therapeutic value and used for the relief of colds, grippe, headache, and similar complaints, is not confusingly similar to the mark "Kare" used to describe an underarm deodorant and antiperspirant, according to the Commissioner of Patents. The first was held to be a medicinal preparation and therefore unrelated to the deodorant which is a toilet or beauty preparation. It was also ruled that despite the lack of testimony that the applicant's goods are held to be medicinal preparations, and the use of a medicinal product or drug in another type of preparation does not change the nature of the preparation.

Twenty-One Oldest Drug Houses

OUR list of oldest drug houses, starting with Schieffelin and ending with Eli Lilly now has two more names and stands at twenty-one. Recently we received a letter from C. H. Taylor Jr., vice-president of the Chicago Pharmacal Company, informing us that "the Chicago Pharmacal Company is the direct successor in business and is run conjointly with Halsey Brothers Company established in 1855." In discussing the list with Jack Remensnyder, Heyden Chemical President, Jack asked about Hance Bros. & White. We communicated with Richard A. Kaskey and were informed that this firm was also established in 1855. Mr. Kaskey sent us a clipping from the company's 1949 price list which reads as follows:

"The Hance Bros. & White Co. was founded in the year 1855 . . . by Edward H. Hance, a graduate of the Philadelphia College of Pharmacy and Science. At its inception it bore the name of Hance, Griffith and Co., but this was later changed to the Hance Bros. & White Co. when Mr. Edward Hance's brother, Joseph, and Dr. James W. White entered the firm. Dr. White was later to become one of the founders of the S. S. White Dental Company.

The twenty-one firms now comprising our list of oldest drug houses in this country are:

Schieffelin & Company	1781
The Tilden Company	1824
The Wm. S. Merrell Company	1828
McKesson & Robbins	1833
Strong Cobb & Co.	1833
Otis Clapp & Son	1840
Smith, Kline & French	1841
Carroll Dunham Smith Pharmacal Co.	1844
Sharp & Dohme	1845
Chicago Pharmacal Company	1855
Hance Bros. & White Co.	1855
William R. Warner & Co.	1856
E. R. Squibb & Sons	1858
Reed & Carnrick	1860
Wyeth, Inc.	1860
The Burroughs Bros. Mfg. Co.	1863
Buffington's	1865
Parke, Davis & Company	1866
Henry K. Wampole & Co.	1872
The Maltine Company	1875
Eli Lilly & Company	1876

Product Liability Rates Cut

PRODUCT liability insurance rates were reduced last month on an average of thirty per cent for bodily injury, and 10.5 per cent for property damage. These changes will not be effective in Texas until December 1, and a filing with a similar effective date has been made in Hawii for the stock companies. The changes for the mutual companies will not apply to Idaho, Montana, California and Missouri. The companies, which are members or subscribers of either the National Bureau of Casualty Underwriters, or the Mutual Insurance Rating Bureau, have also agreed to a number of amendments of classifications and underwriting rules for the various general liability lines.

In some cases where sufficient experience is available, the reductions are considerably above the average figures, and in other classes the reverse is true. The National Bureau says that with very few exceptions, there has been no increase in rates. The rates for product liability insurance were last revised in June, 1947, when average reduction of 24.3 per cent for bodily injury and 27.2 per cent for property damage

were put into effect. The current reductions continue the downward trend in the rates for this type of insurance. A number of new classifications have been added, reflecting increased interest in this form of coverage. Bodily injury rates have been substantially reduced for restaurants and drug stores serving food and beverages.

Vitamin B_{12} Claims

THE National Better Business Bureau has issued a statement on what can and what cannot be said in advertising based on the inclusion of vitamin B_{12} in a drug preparation. The NBBB states that it has consulted a number of authorities, and their opinions are summarized as follows:

"There is some disagreement about whether Vitamin B_{12} has, as yet, been established to be essential in human nutrition. Numerous studies have shown that extremely small amounts of the vitamin have brought about an effective response in both the hematologic and neurologic aspects of pernicious anemia but Vitamin B_{12} has not been shown to be a preventive. There is no reason, at present, to believe that most persons, or any substantial number, need extra Vitamin B_{12} to supplement that provided by the ordinary diet and no minimum daily requirement for the vitamin has been established.

"Studies on the possible usefulness of Vitamin B_{12} in human nutrition are still in the early investigational stage. Aside from its demonstrated value in the treatment of pernicious anemias and other macrocytic anemias, the authorities do not recognize that any nutritional or therapeutic values for the vitamin have been established. One report has suggested that it may affect growth of children and have other beneficial effects but such usefulness has not been proven. So far as is known at this time, there are no indications for the use of a preparation containing Vitamin B_{12} other than in the treatment of pernicious anemias and other macrocytic anemias. These serious conditions require treatment under the supervision of a physician.

"The authorities are unanimous in their opinion that, on the basis of present scientific information, *there are no nutritional or therapeutic claims for Vitamin B_{12} that can properly be made in advertising to the general public.* Specifically, they are unanimous in condemning claims that the use of Vitamin B_{12} or preparations containing it will give consumers better blood, steadier nerves, more pep, longer and stronger life, a new, abundant sense of well-being, or a "new lease on life." They also agree that there may be some possible revision of their views as additional evidence may become available in the future."

Antibiotics Now 50% of Ethicals

PREPARATIONS depending for their efficacy upon hormones, vitamins, antibiotics, and sulfa drugs now comprise about ninety per cent of ethical drug sales, with the antibiotic group alone now accounting for almost fifty per cent of ethical sales, according to Dr. Elliott R. Weyer, of Chas. Pfizer & Co. who adds that the antibiotic portion of the dollar volume is increasing at an astonishing rate. "This dollar increase is more impressive when the drastic downward trend of antibiotic prices is compared with other commodities of our times, "he states, "100,000 units of penicillin now costs less than one four-hundreth of the original sales price, with antibiotic production increasing by leaps and bounds."

Importance of Detailing

CONTINUING marketing research studies show the detail man to be an evergrowing factor in the competition to introduce new products successfully, and to keep old ones as well, William T. Doyle, president of the Research Society, told the sales convention of the Ames Company. Mr. Doyle pointed out that his company's Prescription Audit Reports reveal that the antibiotics and antihistaminics alone account for close to 20 per cent of the prescriptions being written. Since these two types of therapy are less than ten years old, it is quite apparent how important new product development is to a company and also why it is so necessary to have a staff of well trained detail men to influence the doctors to prescribe them, says Mr. Doyle. A recent study showed that over a five day period physicians were being exposed, through detailing and direct mail, to a high of 85 trade names and a low of 61. Mr. Doyle stressed that the new language of trade names which is being built up necessitates continuous detail support, backed up by journal advertising, direct mail, and a strong educational program with the pharmacist.

Indiscriminate Prescribing

RUSSELL S. Boles, M.D., chairman of the Section on Gastro-Enterology and Proctology of the A. M. A. addressed the Section on "The Press and the Patient," at the recent A. M. A. meeting. From this talk we quote the following:

"Extravagant and indiscriminating publicity of proved valuable remedies gives one something to think about. According to the United States Department of Commerce figures, for instance, the domestic production of penicillin increased from 21.192 billions of units in 1943 to 133,229.493 billions in 1949. The domestic production of streptomycin increased from 1,174,582 Gm. in 1946 to 88,699,137 Gm. in 1949. The phenomenal increase in the use of these drugs is out of all proportion to the known indications for their use. This can be attributed to the fact that the public has had its curiosity so unduly aroused that it expects these drugs to be prescribed for conditions in which they can serve no useful purpose. The use of penicillin, it appears, has become almost routine for any manner of illness or injury. It would be a bit presumptuous for the newspapers to claim any credit for the increasing legitimate use of penicillin, as I heard a science writer do; much of its indiscriminate use, however, may be attributed to them."

This is one of the most asinine statements we have ever seen published in the Journal of the A. M. A. and we wonder whether the passing of Morris Fishbein as editor of the Journal has anything to do with its appearance.

Quite aside from the apparent fact that Dr. Boles knows nothing of the large exports of these two important antibiotics, where does he come by the audacity to charge that the press through the public can force the doctors of this country to *prescribe* these drugs *indiscriminately*? It must be remembered that these two drugs are only sold on prescription for reasons which the Food and Drug Administration consider good and sufficient. Since when has a patient been able to tell a doctor what he should prescribe for a given condition? We have heard charges of indiscriminate use of vitamins and other preparations by the layman come from members of the medical profession, but never before have we read of an attempt

on the part of a member of the medical profession to place the blame on someone other than the medical profession for indiscriminate prescribing of drugs restricted to prescriptions. Perhaps the FDA should investigate this angle of drug control.

Pfizer Announces Two More Antibiotics

TWO additional antibiotics, recently discovered, are announced by Chas. Pfizer & Co. These have been given the names of Netropsin and Thiolutin, and they may have industrial as well as therapeutic uses. Preliminary tests on Thiolutin indicate that it may be effective in combating fungi. Netropsin has shown great promise as an insecticide, particularly against clothes moths and carpet beetles, two of the most destructive pests. With these two products, Pfizer has now announced four new antibiotics within the span of approximately one year. The first of these was Terramycin, now being very extensively used by physicians, and the second was Viomycin, a product which is being clinically tested as a specific against tuberculosis.

The Plight of the Drug Retailer

THREE harsh facts which must be faced by the independent druggist are: Less than one-fourth of the independent drug stores can exist on prescriptions and sales of drug items; over 75 per cent of the merchandise sold by independents to survive is outside the possibilities of restrictive legislation; competition of food outlets and supermarkets is unavoidable, N. A. R. D. President Frank W. Moudry told the convention of the N. A. R. D. last month. He said that competition means that it is necessary to modernize, sales personnel must be trained, merchandising must be in accordance with tested methods and ideas, and effective public relations activities are essential to create goodwill.

Mr. Moudry proposed creation of a centralized agency headed by the N. A. R. D., and financed by manufacturers and retailers, to help druggists cope with competition. Such an agency would carry out a program outlined by a management committee composed of representatives of the suppliers and the N. A. R. D., and the activities would be projected through the state associations.

Pointing to flaws in pharmacy laws in almost every state, Mr. Moudry said that many efforts have been made to correct the statutes, but most of them have been stymied through the misguided opposition of the Proprietary Association. He urged amendments to the state pharmacy laws to confine the sale of drug items, including home remedies to the licensed pharmacy.

N. A. R. D. Executive Committee Chairman Charles R. Seward, subbmitting the report of his committee, read:

"The N. A. R. D. has tried to bring about a reduction in the flow of identical prescription products and the conclusions from the efforts are: (1) That the manufacturers refuse to desist despite protests from the druggists, and (2) that the stream of duplicated medicinal specialties will go on undiminished until losses of profits hurt the manufacturers. It is obvious that we are unable to compel them to cut down the number of identical prescription products.

"Last year about 400 pharmaceutical preparations were introduced. It is probable that less than 10 per cent of them contained new substances. More than 90 per cent of the items were of known chemicals and a large number was composed of a single drug and the only distinctive thing about the preparations were the trade names. Nevertheless, the druggists had to stock them in that detail men induced physicians to prescribe the specialties. The capital drug store owners have invested in the graveyards of the prescription department is enormous and the manufacturers have seen to it that the losses are confined to the druggists."

Supreme Court Rules Against FTC

THE U. S. Supreme Court has turned down the contention of the Federal Trade Commission that it has the power to compel manufacturers to tell in their advertising what their products will not do if they make certain affirmative statements in the same advertising. The Court denied a petition for review of a decision of the U. S. Circuit Court of Appeals last March which decision ruled that the Commission "goes far across the line" when it attempts to compel an advertiser to state boldly that his product will not be effective in certain conditions.

The case was one involving certain vitamin-mineral combination products advertised by Ada J. Alberty, Hollywood, Calif., as beneficial for weariness, tiredness, weakness, and other conditions of lassitude. The Commission ordered the firm to stop representing that the preparation had any beneficial effect on the blood except in cases of simple iron deficiency anemia, and ordered that the advertiser stop representations of beneficial effects on conditions of lassitude unless the claims were limited to symptoms or conditions due to simple iron deficiency anemia.

The firm did not oppose these provisions of the order, but appealed from a clause which ordered the firm to state in its advertisements that "the condition of lassitude is caused less frequently by simple iron deficiency anemia than by other causes and that in such cases this preparation will not be effective in relieving or correcting it." The Circuit Court decision now upheld by the Supreme Court deleted this clause from the order.

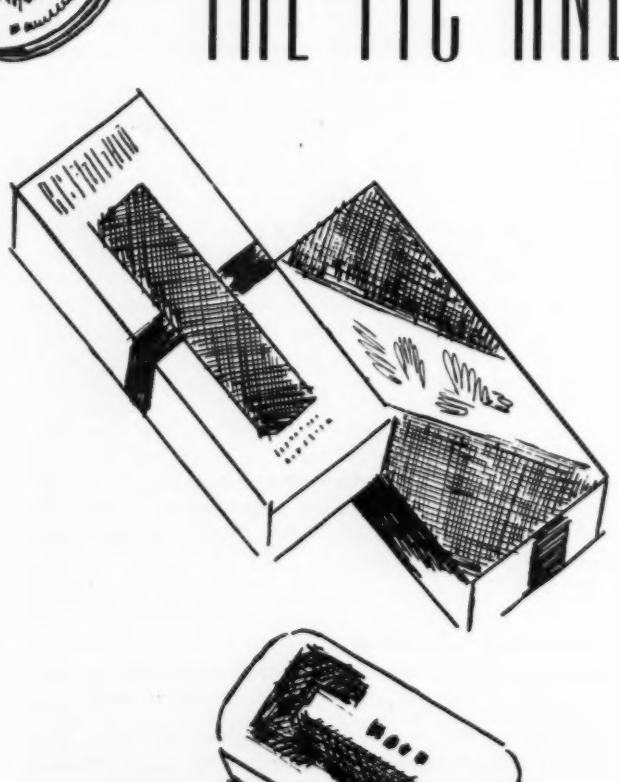
In advertisements of another product sold by the same firm, the Court decision also deleted a clause which would have caused the firm to limit claims for the preparation to those "under the principles of the homeopathic school of medicine."

The policy of the Commission laid down in the Alberty order was followed by the Commission in the American Dietaids case in March 1948 and again this year in an order against Nicholas Sage, St. Louis, formerly trading as Geo-Mineral Co. Commissioner Lowell B. Mason sharply dissented in the Dietaids case who contended that the Commission lacked the power to compel the affirmative and damaging statements to be included in advertisements. This case was not appealed, but it is believed that both of these cases can now be reopened.

Antihistaminics in Bermuda

BERMUDA, where most people ride bicycles and automobiles are limited to 20 miles per hour, has banned the sales of antihistaminics except on doctors' prescriptions because the Board of Health feels that users of the drugs might fall asleep at the wheels of their cars.

THE FTC AND BROMO-SELTZER



WHILE the settling of the Bromo-Seltzer case by stipulation with the Federal Trade Commission came as a surprise to many in this industry, it indicates very clearly what a change in the personnel of the FTC commissioners can bring about. The amended complaint in this case was filed in January 1943,—more than seven years ago. Since that time, three of the FTC commissioners, or a majority, have been replaced, one vacancy still exists for which a nomination has been sent by President Truman, and one of the commissioners on the Commission at the time of the filing of this complaint, Commissioner Ayres, is still a member of the Commission. The order dismissing the Bromo-Seltzer complaint because of agreement by stipulation was approved by the three newer members of the Commission, while the fourth member, Commissioner Ayres, dissented most vigorously. The three commissioners approving dismissal of the complaint are all Truman appointees, namely, Chairman James M. Mead, Lowell B. Mason, and John Carson.

While most of the publicity in this action by the FTC has concerned Bromo-Seltzer and its maker, Emerson Drug Company, the cases of two other manufacturers

were also settled by similar stipulations. The other cases were those of Capudine Chemical Company, manufacturer of Hick's Liquid Capudine, and Miles Laboratories, makers of Dr. Miles Liquid Nervine, Dr. Miles Pills, and Dr. Miles Anti-Pain Pills.

Although the settlement of this case might appear to be part of an attempt on the part of the FTC as now constituted to clear up its file of cases which have been pending for many years, it has far greater significance than that alone. And if one reads the dissenting opinion of Commissioner Ayres, he will learn much of the background of the case. In January 1947, we published an article calling attention to the fact that the Federal Trade Commission had forced two manufacturers of headache remedies containing acetanilid and bromine to abandon these formulas and switch to the ordinary A P C formula which is marketed by any number of manufacturers. We also pointed out that these manufacturers abandoned formulas approved by the Food and Drug Administration—the only government agency possessing power from Congress to approve or disapprove formulation of drug preparations—upon the demand of the Federal Trade Commission—a body possessing no power from Congress over the formulation of drug preparations. The two manufacturers who succumbed to pressure by the FTC were the makers of BC Headache Powders and Stanback Headache Powders.

In case anyone wonders why these manufacturers bowed to the will of the Commission at that time we quote the following from the article in our January 1947 issue:

"To show how the Commission works to break down a defendant in such a case we merely point out that after testimony had been taken at points throughout the country involving travelling of 61,606 miles, the Commission, apparently because the Trial Examiner of the Commission was changed somewhere along the line, decided it was necessary to retake the testimony of three witnesses, one located at Sumter, North Carolina, one at Birmingham, Alabama, and the third at Tuscaloosa, Alabama. The additional mileage involved in retaking the testimony of these three witnesses is approximately 9,142 from Marion, Georgia (home of Capudine), or 14,554 miles computed from New York (home office of their attorney) Elkhart, Indiana (home of Miles), and Washington, D. C., the starting point for various personnel. This additional mileage gives a total of 70,748 miles computed from Marion, or 76,160 miles computed from New York, Elkhart, and Washington, a distance equal to three times around the world at the equator. And as Captain Henry used to say, "This is only the beginning." For there is no assurance that the Commission will not order more hearings, or will not again change the Trial Examiner with the result that the next examiner might want to retake some or all of the testimony over again. Then when the Government finally finishes its case, if it ever does, the defendant must go to work."

We quote again from this article of January 1947:

"A fact that makes the whole situation so fantastic with reference to BC Headache Powders and Stanback Headache Powders is that these two companies and Emerson Drug Company, manufacturers of Bromo-Seltzer, went through the mill with the Food and Drug Administration some five years or so ago. These three companies reduced the amounts of bromide and acetanilid in their preparations and labeled them to instruct that no more than two doses be taken in any twenty-four hours. This proved entirely satisfactory to the FDA at that time and even at the present time the FDA finds no violation. However, the FTC has forced two of these companies completely to change their formulas and they are apparently on the trail of Bromo-Seltzer, which company thus far is able to, and decided to bear the expense necessary to see the matter through to a final conclusion."

While the responsibility for this sort of action by the Federal Trade Commission must be borne by the commissioners themselves, it is the other employees of the Commission who are directly responsible for these actions. It now appears that the commissioners are keeping themselves aware of the activities of those who are directing the various divisions of the Commission, with the result that such tactics probably will no longer be tolerated. It was commonly believed in this industry that the action in these cases was instigated by the Commission's medical adviser Dr. James J. Durrett, former chief of Drug Control of the Food and Drug Administration. He has always been known to be a most resourceful individual who stopped at nothing to make his views control. It appeared as though he was attempting to show his former associates in the Food and Drug Administration that he could still control drug products in accordance with his opinions even though he was no longer in the saddle at the Food and Drug Administration. And under the FTC as it was constituted a little over three years ago, he was getting his way and clearly able to thumb his nose at all who had tried to curb him in his other position.

The sad part of Commissioner Ayres' dissent is that since he was a commissioner at the time that BC and Stanback yielded to the pressure and ended their cases by changing their formulas, he thinks it is dead wrong to settle the Bromo-Seltzer case in any other way. He considers that the settlement of the Bromo-Seltzer case by a stipulation which merely provides that advertisements contain the statement "Follow the label—avoid excessive use," is an injustice to BC and Stanback. He does not consider that he and his colleagues who ruled the Commission at that time perpetrated the injustice to these two manufacturers. He thinks because the Commission as constituted at that time took certain action, the Commission as constituted today should relieve the old Commission of responsibility for an injustice by committing what the present Commission clearly believes would be an injustice against the Emerson Drug Company.

Because of the importance of this case in indicating

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BETTMANN ARCHIVE

EXPANDING ROLE OF ANTIHISTAMINICS

By Milton A. Lesser

IN JUST a little more than five years, the antihistaminics have become one of the most important classes of drugs in the medical armamentarium. Recently, the histamine antagonists, together with antibiotics, vitamins and hormones were characterized by John E. McKeen, president of Charles Pfizer & Co., as the drugs for which "science can predict a decisive role in the health and future of mankind."

Equally indicative of their rapidly growing importance are the observations made earlier this year by Feinberg,[1] an authority on these agents. With the exception of aspirin, said he, the most frequently used drugs at this time are the antihistaminic compounds. Tracing their brief history, he notes that they were first employed for the relief of allergic manifestations, then for many syndromes of unknown etiology, and finally for the treatment of the common cold.

The antihistaminics have earned a prominent place for themselves in the treatment of the more commonly recognized allergic conditions, such as hay fever, gastrointestinal allergy, vasomotor rhinitis, bronchial asthma and urticaria. These indications for the antihistaminics will not be discussed in this review since they have been considered in detail in numerous publications. Discussion concerning the status of antihistaminic drugs in the relief of the common cold will also be avoided at this time.

During the last three or four years, however, a number of physicians have had occasion to try the antihistaminics in various other conditions and they have often reported some interesting observations. Aside from their expected value in allergic disorders, this group of drugs has displayed actions and effects that indicate potentive usefulness in a variety of troubles ranging from poison ivy and motion sickness to Parkinson's disease and ulcers.

According to Winter,[2] the antihistaminic drugs on the market in this country represent approximately a score of different chemical compounds. These are the substances that have survived out of an estimated 5,000 or so that have been subjected to pharmacological testing for antihistaminic activity.

With certain exceptions (e.g. thephorin), most of these compounds are phenolic ethers that are closely related structurally.[3] Because of their complex chemical names, almost all of the commercially available antihistaminics have been given simpler, yet indicative coined names.[4-5] These are given in the table below, together with the trade name and manufacturer. This tabulation is indicative rather than inclusive. Aside from omissions because of lack of data, the listing does not include preparations made by mixing antihistaminics with other drugs. Nor does it include products intended solely for relieving the symptoms of the common cold.

Major Antihistaminics

Trade Name	*Coined Name*	*Manufacturer*
Anahist	Thonzylamine	Anahist (Nepera)
Antistin	Antazoline HCl	Ciba
Benadryl	Diphenhydramine HCl	Parke, Davis
Chlor-Trimeton	Chlorprophenpyridamine maleate	Schering
Decapryn	Doxylamine succinate	Merrill
Diatrin	Enstamine HCl	Warner
Histadyl	Thenylcpyramine HCl	Lilly
Neo-Antergen	Pyranisamine Maleate	Merck
Neohetramine	Thonzylamine	Wyeth
Perazil	Chlorcylizine	Burroughs-Wellcome
Pyribenzamine	Tripelennamine HCl	Ciba
Pyrrolazate	Pyranthiazine	Upjohn
Tagathen	Chlorothen citrate	Lederle
Thenylene	Methapyrilene HCl	Abbott
Thephorin	Phenidamine tartrate	Hoffmann-La Roche
Thylogen	Pyranisamine maleate	Rorer
Trimeton	Prophenperidamine	Schering

Despite their new uses and their expanding utility, the primary indication for the antihistaminics is the relief of allergic symptoms. As explained by Levin and Moss,[3] this entire group of drugs exhibits similar pharmacological properties in varying degree. All of them antagonize the physiological effects of histamine in experimental animals. They prevent histamine-induced contraction of the smooth muscles of the bronchi and intestines, and abolish the histamine effects on blood pressure and capillary permeability. All are effective in preventing histamine-induced anaphylactic shock and to a smaller extent they are effective against other types of induced anaphylaxis.

The use of antihistaminic drugs in allergic diseases is based upon the "histamine theory," which is yet to be proven conclusively. According to this theory, says Winter,[2] the antigen-antibody reaction occurs within or at the surface of cells, and the product of this reaction causes abnormalities in the metabolism of histidine (an amino acid), so that it is converted to histamine. Histamine, in turn, is responsible for many of the symptoms associated with allergic reactions. It is believed that antihistaminic drugs relieve the symptoms partly by blocking the reaction of histamine with the cells. However, they do not directly neutralize histamine or prevent its formation.

While there is still a good deal more to be learned about these agents, it is generally agreed[6] that the antihistaminics are particularly effective in the edema-producing types of allergy, such as urticaria, angioldema, serum disease, seasonal hayfever, and to a less degree, perennial vasomotorrhinitis. Their role in asthma has proved rather disappointing.

Various studies[7] have been made in attempts to determine the comparative values of the several antihistaminics. Unfortunately there has been considerable discrepency between the reports of different observers concerning the comparative results obtained with the same antihistaminic agents. As noted by Levin and Moss,[3] some agents are more effective than others in a given patient, but none are universally and completely effective in all patients. As yet there is actually no way to determine in advance which is the best antihistaminic for any given individual.

These workers call attention to the fact that not only is there marked individual variation in therapeutic response, but also in the frequency and importance of side reactions, such as drowsiness, weakness, stupor, confusion, dizziness and a number of other undesired effects. They estimate that approximately 10 per cent of all patients using antihistaminics are forced to discontinue their use because of severe side reactions. Reactions of smaller but significant degree to be annoying occur in 35 to 65 per cent of patients. In a small number of cases, tolerance for an antihistaminic can be established. Conversely, a drug may lose its effectiveness after long usage.

Drowsiness is the most important reaction encountered, and its frequency seems to vary with the different agents. Actually, however, the depressing effect of the antihistaminics is not always a disadvantage. It is noted that there are occasions when a sedative effect is desirable, especially for the relief of symptoms appearing during the night.

Winter[2] points out that the acute toxicity of the antihistaminic drugs is very low as compared to their activity. All of them have a high therapeutic index. Chronic studies have shown that cumulative effects do not occur if the doses are properly spaced. However, there is no known antidote for a toxic dose of an antihistaminic drug.

Aside from their effects in relieving the symptoms of allergic conditions, the antihistamines display a number of actions that make them of benefit in an ever growing list of other illnesses. As pointed out by Sternberg, Perry and Le Van,[7] the antihistaminics display various actions such as anti-acetyl-cholinic, local anesthetic, sympathomimetic or sympatholytic. Some of these drugs have also shown antispasmodic and quinidine-like properties. These workers also make the observation that those compounds which show less activity, so far as actual antihistaminic effects are concerned, may well be superior in other actions.

Winter[2] similarly notes that all antihistaminic drugs possess the properties of relaxing smooth muscle and of antagonizing the action of acetylcholine to a greater or less degree. They actually are, therefore, a special kind of antispasmodic agent. He points out, too, that most of the antihistaminics are potent local anesthetics, but there is no relationship between this action and their therapeutic efficiency.

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BETTMANN ARCHIVE

MEDICAL CARE AND THE COURTS

BECAUSE the Oregon State Medical Society and other medical societies in the State of Oregon sought to organize plans of prepaid medical care, they were charged by monopolistic practices by the Federal Government and sued in court. However, Federal District Judge McCulloch recently held that the Government had failed to prove that the defendant medical societies conspired to restrain and monopolize prepaid medical care in their areas of operation. The Oregon Physicians' Service was held not a conspiracy but rather an entirely legal effort by the profession "to meet the demands of the times for broadened medical and hospital service, eliminating the evils of privately owned concerns as well as the element of private profit" over and above legitimate hospital and medical care. In addition the Court found that the cooperating doctors and their associations had competed fairly with non-professional medical care plans and had not boycotted doctors serving other health plans; that membership in the cooperative involved but a small portion of the state population; that medical practice is not a trade; and that fee schedules do not constitute illegal price fixing.

As a guide to the preparation of formal findings and conclusions, Judge McCulloch appended a series of notes on various issues which arose during the trial. We include excerpts of special interest to this industry:

"In a measure this case is an attack on the professions. Everything critical of the doctors that has been said in this case could also be said of the legal profession.

"The World Revolution that we hear about allows no place for the professions. All that is principle, dignity, the efforts of the ages to create an aristocracy of intellect—these are to be destroyed in the interests of the "common man." He will be "common," indeed, without professions in the society which he is to rule."

"Leaders among the doctors maintain the view that doctor owned prepaid medical plans are the profession's answer to socialism. Can it be that a profession may not defend itself by reorganization of its methods, by doing within the profession what has been compelled elsewhere by law; that, thus, to reorganize and seal to preserve its independent status makes an organized profession and its leaders criminals and subject to the injunctive power of the courts? In short, that organized medicine must remain a sitting duck while socialism overwhelms it. I would not expect an American court to hold that."

"Socialized medicine may overtake them but the doctors claim the right to save the profession from socialism. That is what this case is about, according to the doctors' viewpoint. As to this defense it must be conceded that the purpose with which action is taken is of prime importance under the Sherman Act."

"Constitutional democracy is not a one-way road. Those seeking changes, radical or otherwise, may urge them. Those who believe in things as they are or who seek to retain them in modified form may oppose radical change, without becoming subject to the criminal laws. That certainly includes vitally interested parties whose way of living, whose living itself, is threatened. This is entirely aside from considerations of public interest.

"What was the purpose of the doctors in organizing the Oregon Physicians' Service? Was it to obtain a monopoly in the prepaid medical field, or was it to save themselves and their profession from threatened socialization? I hold it was the latter and that nothing in the antitrust laws deprives them of the right to fight to defend their independent professional status. This is entirely different from whether socialization can lawfully be forced on them. I might add that any construction of the statute would raise the gravest questions."

"The present case represents an effort to apply the decision obtained against the American Medical Association to Oregon. The facts are different. The times are different."

"Since doctors generally are now doing the same things for which they expelled their brothers in 1936 and the years following, fair play suggests that amends, where possible, be made to those still living. Doctors expelled or who resigned under pressure from the medical societies should be returned to membership."

The instituting of such a charge against the Oregon State Medical Society clearly points out that the "powers that be" in the Federal Government are "playing for keeps" so far as the medical profession is concerned and are not going to give them a chance to work themselves out of their difficulties, if they can help. This is like kicking a man when he is down, but that means nothing to these people who are determined to bend the medical profession to its will as a most important early step which must be taken if full state socialization is ever to be brought about. Judge McCulloch does not deny the right of the Government, through the people to bring this about, but he does not like the short-cut methods which they are attempting to use, and he points out that it is clearly illegal.

Whatever mistakes the medical profession has made—and they have made plenty—they have finally recognized that the people of the country are quite solidly back of a demand for a change from the old time methods of obtaining and paying for medical care. The medical profession, quite generally, is now attempting to give the public what it wants with the limitation that the profession believes that the public will fare better in the way of medical care if the control of this medical care is not taken over by the Government. Therefore the doctors of the country are hard at work in setting up cooperative plans for prepaid medical care, they are hard at work assisting and cooperating with others who are attempting to set up non-profit plans, and they are also working hard with insurance companies to get them to extend their coverage in the field of medical care. In short, what the medical profession is attempting to do is to change conditions in medical care so that the public will be well satisfied with the care which it gets and with the method of paying for it so that the people will no longer look to the Government for correction of conditions in medical care.

But those in the Federal Government who would bring the people of the country further under this control have no desire to give the medical profession a chance to work out such a program. They believe that control of the medical profession must be accomplished as rapidly as possible and they are working like fury to build up further the public feeling that such a step is essential to the welfare of the average citizen of this country. They have not as yet been able to get this interest on the part of the people to a high enough point and hold it there sufficiently long for its effect to result in enactment of the necessary legislation in Washington. And all of these extensions of prepaid medical care plans introduced by members of the medical profession are threatening to undermine their position but resulting in a lessening of public interest in a Federal program of compulsory health insurance.

Clearly then, the only bulwark against these social planners who would offer more and more welfare services in return for more and more taxes which they would spend for anything they desired, is the courts. And the courts should form an excellent bulwark for the reason stated by Judge McCulloch to the effect that all the charges made against the medical profession in the case could also be made against the legal profession. There is no question that if the medical profession falls under government control, no other profession or institution is safe, and the legal profession will sooner or later get the same sort of treatment. The only protection which the legal profession has is that such a high percentage of lawyers enter the legislative field, at least during their early days, and also the fact that all the judges before whom these issues would come are themselves members of the legal profession.

Judge McCulloch is to be commended for his decision in this case, but the main point in the controversy is the extent to which the Federal Government has revealed it is willing to go to bring about control of the medical profession by bureaucrats in Washington. And an adverse decision by Judge McCulloch or any other judges will not stop them. They will merely think up other issues on which charges can be brought and they will sweat and scheme to find better arguments to conceal the basic issue. Also they will study the judges of the country and arrange to get a case before a court in which a decision favorable to them is more likely to be handed down. In other words they will stop at nothing to have their own way.

EYE MAKE-UP

By Harry Hilfer

MAKE-UP for the eyes has been regarded as a necessary but unprofitable part of a line by many of the cosmetic manufacturers. Most women use these materials but so sparingly that repeat sales come at infrequent periods and total sales are relatively small. There is a great enough demand however to make their inclusion necessary, particularly by houses whose reputation is built on make-up. There are recurring cycles of increased popularity of eye make-up, which is associated with new fashions coming into popularity. Such a cycle appears to be about to make itself felt, because of a Parisian trend which accents the appearance of the eyes. A review of the methods of formulation of the eye make-up preparations therefore seems timely. If this trend continues, the sales of these preparations may be expected to increase and perhaps assume a more important part of the general cosmetic picture.

In a discussion of eye make-up the scope of the preparations involved is usually limited to the three basic preparations, eye shadow, mascara and eyebrow pencil. Preparations whose function is to ease irritations or defects of the eye itself are not usually included since these are dependent on a therapeutic function best handled by physicians. The discussion which follows will include those preparations used around the eyes to enhance their beauty. All of these contain pigments whose purpose is to provide color effects and in this connection the law limits the choice of colors to natural and inorganic coloring matters. This automatically bars the use of lakes and other organic pigments made synthetically and limits coloring agents permitted for use to carbon blacks, the various hydrated iron oxide pigments and inorganic pigments such as ultramarine blue. Compounds containing heavy metals are barred and sulfides such as zinc sulfide are better not used because of the ease with which hydrogen sulfide may be generated under conditions of acid pH. White pigments such as titanium oxide and ink oxide

are in common use as are fillers such as talc, chalk, zinc stearate and others, but these are the extent of the permitted coloring agents and fillers.

As far as the vehicles for application of the colors, there is a much wider scope. Materials used here are contained in the list of materials generally used for other cosmetic preparations. There is, therefore, available to the formulator the entire series of raw materials which when used judiciously could serve any desired function. Greatest stress will be given the mascaras since they are the most widely used of the eye make-up preparations and probably the most important.

Mascaras are used to accent the eye lashes and are generally applied with a brush. They come in two forms, the dry cake which at present is the more popular and the paste, packaged in a tube, which is gradually increasing in popularity. Both of them are expected to form a film after application which is relatively impervious to water, and will therefore not streak. The cake mascara is a nonaqueous cake which is applied to the brush by means of gentle trituration with water, the mechanics of which is affected by the formation of an emulsion which can then be readily applied to the eyelashes. In order to allow ready formation of the emulsion good sized amounts of an emulsifying agent must therefore be used. If this were all the vehicle used, the film would obviously be affected by the smallest accidental addition of water to the dried film. Basically, therefore, the film must also contain a water repellent substance which could overcome the hydrophilic properties of the emulsifiers. Too large an addition of water impervious substances would make the cake difficult to be picked up by the brush by means of gentle trituration. Proper formulation of the vehicle therefore consists in properly blending the hydrophilic emulsifier against the lipophilic water repellent in such a manner, that the emulsion may be easily formed with gentle trituration—in this case by rubbing the wet brush across the surface of the cake—but at the same time keeping the dried film from being able to reform the emulsion when water accidentally touches the surface. The water in this latter case is represented by tears and other aqueous fluids from the eyes.

Since both a lipophilic and hydrophilic agency are represented in the anhydrous cake, one must be miscible with the other. The hydrophile in almost universal use is therefore the triethanolamine or other alkanolamine soaps, since they are more easily soluble in the fatty esters than are the sodiums or potassium soaps. In addition, triethanolamine is not nearly as strong an alkali as are caustic soda or potash and therefore pH of the aqueous system in which it is contained will be lower and irritation minimized.

The lipophile may be represented by any of a number of waxes or by mixtures of them if special effects are desired, with the most popular being Carnauba wax. Carnauba wax is a high melting point wax and is capable of increasing the luster of the dried film. The high melting point and hardness with which it endows the finished film would further prevent easy absorption of water. In addition, triethanolamine stearate is easily soluble in the molten wax and the mixture does does not separate on cooling to room temperature. Further addition of other waxes are made to make the film less brittle and also to make the finished cake more pliable. These waxes may be any of or a mixture of several including, beeswax, glyceryl monostearate candelilla wax, to mention a few, and softer substances, such as lanolin and esters of low molecular weight alcohols such as isopropylmirestate and butyl stearate —these latter additions having as their function a means of controlling the film thickness.

The quantity of coloring agents added vary with the shade but are usually about 10 per cent of the total weight and may be incorporated by grinding into the molten vehicle by means of a rollermill with heated rolls or by means of an ointmentmill. The waxes are then remelted and poured into moulds from which they are stripped upon cooling. The one precaution which should be observed during formulation is the inclusion of an adequate anti-mold preservative since these materials support this type of growth readily.

The relative percentages of hydrophylic and lipophilic agents are not fixed but are dependent on the other materials in the formulation. Generally speaking however the triethanolamine soap is used in anywhere from a 25 per cent to 50 per cent concentration. Higher than 50 per cent of soap makes the product difficult to melt and to otherwise handle.

The cream mascaras are actual adaptations of the cake with the proper amount of water added. However, in the creams it is possible to increase the ratio of lipophile to hydrophile and therefore render the product somewhat more waterproof. The reason for this lies in the comparison of the manufacturing methods. In the dry cake emulsion formation is limited to cutting with a moist brush, while if the cream is made under factory conditions, mechanical methods for emulsion manufacture and stablization such as the use of colloid mills may also be used. In this way the emulsifying agent may be reduced to as little as 1/5 or even 1/10 the quantity of lipophile. The amount of pigments may also be increased since the limiting factor in the cake aside from the standpoint of the fixed method of emulsion formation is the difficulty of manipulation if too large a quantity of pigment is added to the vehicle. Since water contains so large an amount of the cream vehicle, larger portions of color, as compared to the non-volatile base, may be added. A further innovation possible in the cream because of its being packaged in a container from which evaporation is reduced to a minimum is the inclusion in the formulation of soap forming alkalis which are capable of evaporating with the aqueous portion of the film after application leaving a non-emulsifier containing film which cannot be removed with water unless soap or other detergent is used.

The scope of the lipophilic agencies may be further

(Continued on page 714)

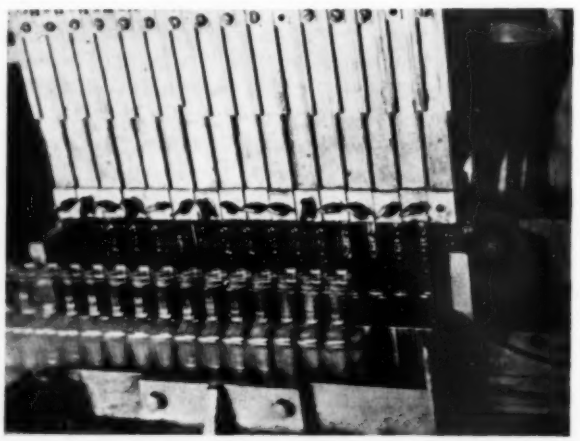
PACKAGING MACHINERY OUTLOOK

*By G. W. von Hofe**

IT IS PERFECTLY evident that as time goes on and the defense program expands, packaging machinery will become more difficult to get, particularly those machines designed for a specific purpose. The Munitions Board has recognized this problem and has classified certain manufacturers as Class II Industries. This means that the normal products of these manufacturers are basic in nature or are potential bottlenecks to wartime output of material and that their capacity cannot be fully counted on to produce defense orders. Some of the packaging machinery manufacturers have been classified in this category. This will insure a supply of at least a certain number of machines as, if, and when, some materials allocation program is worked out to see that such companies get the necessary materials to produce the machinery so classified. At the present time there is no means for a manufacturer of these critical items to acquire any materials for their manufacture. At the moment, I don't know of anyone in our industry who has stopped production due to the lack of materials, but I can assure you that design changes are already taking place to accommodate substitutions and it is just a matter of months before a definite squeeze will be felt. It is hoped that very shortly some program will be worked out to insure a flow of materials to keep these critical machines in production.

As an indication of the importance that packaging machinery plays in our economy and particularly a war economy, one only has to study the prominent position packaging has been given by the Munitions Board organization. Under the Director of Supply Management, there has been set up a Packaging Division. This Packaging Division is in close coordination with the Packaging Boards of the Army, Air Force, and Navy. These service Packaging Boards are further broken down into divisions to cover the various items that are procured by the military. In order to keep the supplies flowing to the various branches of the services according to their exacting specifications, thousands upon thousands of packaging machines must be kept operating at top efficiency. On top of the military demand is an even greater civilian requirement which requires a vast number of machines. This very clearly brings out the basic importance of packaging machinery and indicates the necessity of maintaining its manufacture, as well as continuing the production of repair parts so that machines in the field can be kept in perfect operating condition. In the actual production of a package there is an opportunity to substitute one material for another in case of shortages or to change the shape and structure of a package to keep production moving, but there is no substitute for packaging machinery. You either have it or you don't produce.

In order to keep the armed forces informed as to the types of machinery presently used to produce packages and also keep them up to date as to new developments in packaging machinery, the Packaging Machinery Manufacturers Institute has organized a Mobilization Planning Committee to act as a liaison between its members and the armed services. Another function of the Committee is to keep the necessary Government agencies acquainted with the importance



of our industries' machines so that the industry will be allocated materials in sufficient quantities to keep up with package production requirements.

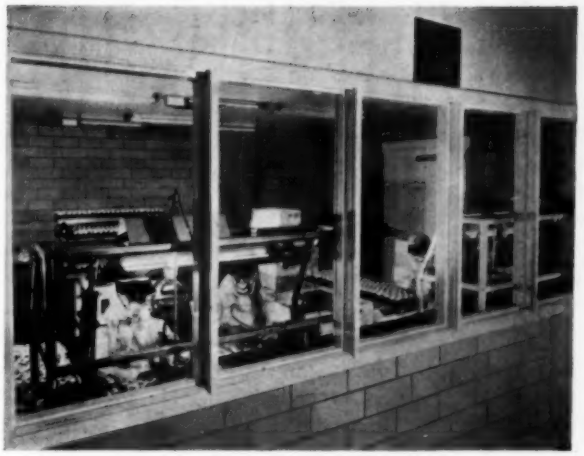
This Committee is acting as a clearing house for requests of new types of packaging machines as new specifications must be met. The Machinery Institute will call upon its best qualified members to assist in the development of whatever new types of packaging machinery will be required. In this way, it is hoped that existing standard machines or modifications of standard machines can be used to produce the bulk of the armed services packaging requirements.

With this keen understanding of the importance of packaging by the Munitions Board and the various services and the effort put forth by the machine manufacturers, it is hoped that the necessary materials for an adequate supply of packaging machinery will be provided so as to keep our economy in good working order.

As previously mentioned, there are hundreds of thousands of packaging machines in use today by all branches of industry. The users of these machines can assist in maintaining a supply of machines by anticipating their requirements. Many machines of standard type are available today on reasonably short deliveries. It would be very good insurance for those companies who will find it difficult to get a priority under emergency conditions to check over their equipment now and replace their older and worn machines with new equipment before things get too tight. Any equipment now installed will make the load that much lighter under emergency conditions.

One annoying situation that will be remembered for a long time was the sad fate of many a user of packaging machinery when he ordered repair parts during the last war. Now then, there are certain parts of production machines that need replacing periodically. Why not have your maintenance departments determine what these parts are and order a goodly supply. I cannot tell you just how long that quantity should last but any inventory you would have on hand would make available shop time to produce parts for those unexpected breakdowns which always seem to occur

*New Jersey Machine Co.
Presented at Packaging Institute Forum Oct. 23, 1950.



at the most inopportune time. A program of preventative maintenance is a must under present conditions. A good maintenance program with an ample supply of parts on hand will be very cheap insurance against the day when a production line is shut down for the want of a repair part. All machinery manufacturers are in reasonably good condition to supply repair parts now. There is no telling how soon this will change, so you had better take advantage of it while you have the chance.

To the uninitiated this may sound like a suggestion to do some scare buying. There is no such thing as scare buying in capital goods like production machinery. Any surge of orders for machinery that has taken place recently is due to the fact that buyers found out they had neglected to follow a regular replacement program on equipment and the present condition has jolted them into action.

Some people may be of the opinion that if nothing drastic happens in the international situation, that the supply of machinery will ease up. This very definitely will not be the case due to the fact that much of the supplies and equipment required for the defense program are mechanical in nature and will consume a tremendous amount of machine shop time and some of this time will have to come from the producers of packaging machinery.

Furthermore, a great percentage of the packaging machinery that is being purchased today is of the fully automatic type rather than the semi-automatic type. This means that in order to produce the newer high-speed automatic machines, more shop hours per unit are being consumed. As the manpower picture becomes tighter, an even greater percentage of automatic equipment will be purchased.

Fortunately for the users of this type of equipment, practically every packaging machinery manufacturer has materially increased his ability to produce. At the same time, many completely new machines are now being offered to perform operations at speeds two to five times greater than the same operations were done a matter of two years ago. Also, many new machines

(*Continued on page 711*)

SOLIDIFYING POINT OF PETROLATUM

*By A. Kinsel and Joseph Phillips**

Introduction

PETROLATUM is defined mainly by its consistency (or hardness), by its color, and by its "melting point." Most petrolatum, especially in the pharmaceutical and cosmetic industries, is sold in jars and tubes. The use of these containers makes it necessary that the petrolatum be in the solid or semi solid state at ordinary temperature. On the other hand, the melting point must not be excessively high; otherwise the petrolatum would not be softened sufficiently by body heat. Therefore, the melting point is a very important property to the ultimate consumer. It is no less important to the pharmaceutical or cosmetic manufacturer when containers are filled with petrolatum or preparations having petrolatum as a base. The manufacturer is interested in having the contents solidify in the container as soon as possible after filling. Generally, the lower the melting point of the petrolatum the longer it takes after filling for the petrolatum to solidify to such an extent that the containers can be handled.

Since petrolatum is a complex blend of solid and liquid hydrocarbons, it does not have a definite "melting point" like a pure chemical compound, but has a melting point range. It can be considered to be completely in the liquid phase only at a temperature above its cloud point; i.e., the temperature at which the petrolatum is completely free of any solid phase. On the other hand, it does not behave as a solid until it reaches a temperature which lies many degrees under its cloud point. Even many degrees below its cloud point, petrolatum is not a true solid, but exhibits marked plasticity and can be made to flow if a shear force is exerted upon it.

Despite the fact that petrolatum does not melt at a definite temperature point, there are several well-known empirical tests for the determination of what is called the melting point of petrolatum. The various tests in actual use yield values all the way from the cloud point to almost 30°F lower. This variation can be explained by the difference in shearing stress which is exerted on the petrolatum by the different test methods. The following exemplify some of the common melting point tests in current usage:

(1) ASTM Melting Point (D127-49)[1]

This melting point determination is run by dipping a chilled thermometer into the molten sample so that its bulb is partly immersed, rapidly withdrawing the thermometer and allowing the sample to solidify on the bulb. The thermometer is then placed in an air bath which is slowly heated and the temperature at which the first drop of the sample falls from the thermometer bulb is taken as the melting point. It is apparent that this melting point test determines the temperature at which the force of gravity exerted on the drop of semi-solid petrolatum is equal to its yield value (the minimum shearing force required to produce flow). In other words, it is the temperature at which the structure of the sample becomes so weak that gravity causes it to act like a liquid rather than a solid. Since the larger the sample of petrolatum on the thermometer bulb the greater is the force applied, the melting point determined in this way would be expected to vary inversely with the amount of petrolatum adhering to the thermometer bulb. In actual practice it has been found that the melting point by this procedure does vary with the amount of sample originally picked up on the bulb. This tends to impair the reproducibility of the method.

The results of this test method depend also on the viscosity and surface tension of the sample being tested. Since these properties are not directly dependent on the true melting point, the above method yields results which are often at considerable variance with the other common melting point methods, and are almost always higher than the other methods.

(2) ASTM Congealing Point (D938-47T)[2]

The Congealing Point is determined by dipping a thermometer into the molten sample until it reaches the temperature of the sample. The thermometer is withdrawn so that a droplet of the molten sample is suspended from the thermometer bulb. The thermometer is then rotated until the solidified droplet rotates with the bulb, and the reading of this temperature is taken as the Congealing Point or Rotary Melting Point. In other words, the Congealing Point is that temperature at which the force due to gravity is less than the yield value and the droplet behaves as a solid and rotates with the bulb. Again, as would be expected, the larger the droplet the lower the equilibrium temperature, and the lower the results. This fact impairs the reproducibility of the method.

(3) Saybolt Melting Point)[3]

This melting point is obtained by inserting a pine stick vertically into a shallow bed of solid petrolatum and immersing the assembly in a water bath. The water is then slowly heated, and the temperature at which the pine stick is released from the petrolatum and floats to the surface of the water bath is taken as

the Saybolt Melting Point. Following the line of reasoning used in the first two examples, the Saybolt Melting Point is the temperature at which the buoyancy of the pine stick in water is equal to the shear force required to break the structure of the solid petrolatum in which the stick is embedded. Obviously, the many possible variations in the buoyancy of the stick will greatly affect the results.

(4) Ubbelohde Melting Point[4]

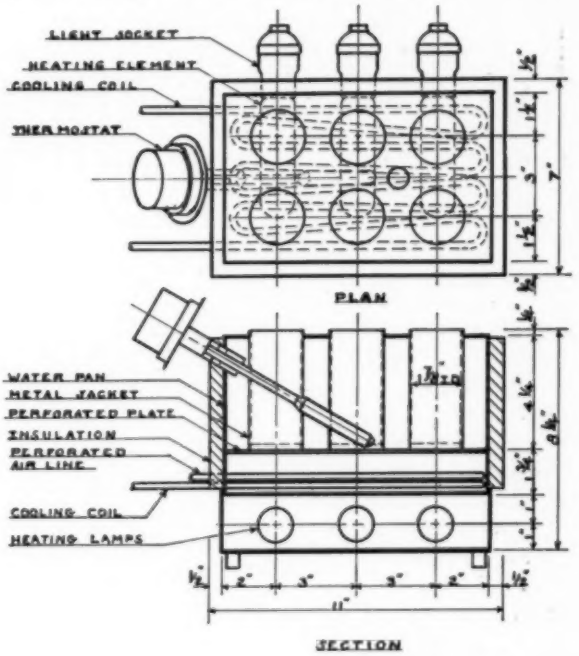
This determination is made by transferring a sample of solid petrolatum into a small glass or metal cup having a narrow orifice on the bottom. A thermometer is inserted through the wide end of the cup into the petrolatum. The assembly is placed in an air bath and is heated. The temperature at which a drop of the petrolatum falls through the narrow orifice is taken as the Ubbelohde Melting Point. In terms of plastic flow, the Ubbelohde Melting Point is the temperature at which the force of gravity acting on the petrolatum sample is equal to the shear force required to extrude the sample through the orifice. Since the Ubbelohde cups are filled with the solid sample by means of a spatula, it is very difficult if not impossible to avoid getting air bubbles in the sample; and, it can be readily seen that the presence of air bubbles will change the shearing force on the sample. This variation adversely affects the reproducibility of the method.

Solidifying Point of Petrolatum

Since petrolatums do not have a sharp melting point and since all of the melting points in actual use are simply the temperature at which a standardized distorting stress is equal to the shear resistance of the sample, no one method has a sounder theoretical basis than any other. The only reason for determining the melting point of a petrolatum is to be able to predict at what temperature the product will behave like a solid and at what temperature it will behave like a liquid. Such being the case, the melting point procedure should duplicate as closely as possible the distorting stress which will be applied in deciding whether a petrolatum is a liquid or a solid at a given temperature in actual use. Since the bulk of petrolatum is filled in jars, the melting point procedure should reproduce as closely as possible the conditions under which petrolatum is actually packaged. Reference to the description of the various melting point methods generally used show that none is satisfactory from this standpoint. On the other hand, the ASTM Pour Point (D97-47T)[5] method unexpectedly appears to fit this requirement. However, this method was designed for the determination of the pour point of mineral oils and is not directly applicable to petrolatums.

The procedure for the ASTM Pour Point test is briefly as follows: The sample in a 4-oz. bottle or jar, fitted with a thermometer, is allowed to cool at a prescribed rate and is tilted at intervals. The pour point is the temperature at which the surface does not move when the container is kept in the tilted position for five seconds. Thus, the pour point is that temperature at which the solid structure of the surface of the sample is strong enough to withstand the distorting force exerted by the unsolidified interior under the force of gravity when the jar is tilted.

In view of the fact that this method approximates the conditions for the determination of petrolatum melting in actual practice, it was decided to modify the ASTM Pour Point to make it applicable to petrolatums and allied products. This modified pour point is designated as the "Solidifying Point."



CONSTANT TEMPERATURE WATER BATH

FIG. 1

Determination of Solidifying Point
Apparatus Required

1. Cloud and Pour Test Jars in accordance with ASTM Method D97-47.
2. ASTM Congealing Point Thermometers (D938-47T).
3. A thermostatically controlled water or air bath kept at 86 ± 2°F (30° ± 1°C) (Figures 1 and 2).
4. Metal jackets 4-½" deep and having an inside diameter of 1-⅞" fastened in a vertical position to the false bottom of the bath. Agitation of the water is conveniently accomplished by a stirrer or by gently bubbling air through.
5. Rubber Gaskets to fit snugly around the outside of the test jars. These serve to steady the jars when they are placed in the jackets.

Procedure

Pour the sample at 180°F into the test jar to the 2" mark. Insert the thermometer into the jar by means of a slotted rubber stopper so that the top of the ther-

(*Continued on page 722*)

*Daugherty Refinery, a Division of L. Sonneborn Sons, Inc., Petrolia, Pa.

SOME DRUG INDUSTRY

NOT only has a revolution taken place in the drug industry at the retail level but also at the manufacturer's level. There is a scramble for the introduction of new products. Every new laboratory discovery has brought the introduction of many new and many successful items. This has been, not only stimulating, but also has confirmed the security of the future. As long as manufacturers are keen in their study of potentials and as long as they keep bringing out the new items that are in keeping with the trends of the times, just that long will the drug industry continue to be successful in the business of retailing.

Manufacturers have become interested additionally in such revolutionary trends as package designing, based on their studies of consumer attention to their products when placed on display. Sizes of packages, types of containers and all these factors have been given careful study. Nationally famous designers have been retained by manufacturers to create product appeal that makes the consumer say "I want it."

The most challenging problem of the future is the encroachment of other retailers on the handling of products formerly identified with drug store outlets. This "changing" channel of distribution is so revolutionary that it presents one of the top problems of the day. Some are immune to the encroachment, taking the position of an ostrich that says "this doesn't mean me." These shrug at the small percentage of business lost to other types of outlets and say that the future may show a slight dropping off but not important enough to endanger results. It is however, the other type of retailer that is alert to this new challenge and is seeking information, enlightenment so that he may seek a solution to the problem. It may mean complete remodeling, revamping and even a change in location, but this merchant recognizes the challenge of the future.

Just realize for a moment, some of the statistics that have recently been revealed. For example, that food stores are now America's No. 1 sellers of cigarettes, doing 40 per cent of all cigarette business. Another survey that shows that 45 per cent of total candy volume is now in grocery stores; a survey that shows that drug stores in 1949 did 52.24 per cent of the drug and cosmetic business; that grocery stores jumped from 13.75 per cent in 1947 to 15.49 per cent in 1948 and 16.48 per cent in 1949 (department and variety stores remain the same with roughly 6 per cent each, and door to door distributors jumped from 4.78 per cent to 4.83 per cent in 1948 and 5.91 per cent in 1949).

*General Manager, Katz Drug Company.
Abstracted from address before Federal Wholesale Druggists Assn., October 23, 1950.

PROBLEMS

*By Morris R. Shlensky**

This change in distribution has been so dramatic that today manufacturers, as distributors and wholesalers are all examining the change to determine a continuance of old policies or the adoption of new. Most important of these changes in methods of distribution has of course been the introduction of drugs in super markets. Surveys show that over 80 per cent of the food stores of America now carry some representation of health and beauty needs. Whereas some food markets are limiting their stocking to only a few of fast selling items, others have expanded to several hundred.

To meet this change, another revolution has taken place. Some drug chains have entered into the grocery business themselves and others have conducted more daring experiments, including recently, the combination of a drug store and grocery store into a common venture. This in itself provides a clue to the thinking in most chain store headquarters of America. It gives gross evidence to the recognition of the need for "grocery store traffic" to increased rug product turn-over.

This "marriage" of a drug chain and a grocery chain may prove to be one of the most important incidents in the all time history of the drug industry. Its results may be far reaching and very involved. So that it will not be misunderstood, it is my observation that this combination of types of stores or the other system of introducing groceries into a drug operation, are not capitulation nor retaliation. They represent only the attempt to find the solution to the problem of successful retailing. They present a thinking that combines traffic merchandising with general merchandising, to accomplish satisfactory profit.

Groceries in a drug store do not necessarily mean a "get even" experiment. It might well be translated into an attempt by a retailer to maintain and even increase his store traffic. What the future holds in this matter of distribution, time alone will tell. Standing idly by or discounting this trend with a shrug of the shoulders however may well prove an attitude that can finally result in a serious disturbance to any drug retailer. Let us recognize at this point that the druggist of America has kept pace with the modernization of retailing and has adjusted and reconciled himself to expenditures and investment that may accomplish this catering to the demands of the shopper for finer and better stores.

Let us also admit and understand that the druggist has alerted himself to the possible change in the channels of distribution. He has however a problem confronting him in the fall of 1950 which surmounts any other single factor that points to the precariousness of his position. Regardless of any other purpose that Lilly's Digest will serve, it does furnish

(Continued on page 707)

PENSION

ESTABLISHMENT of employee-employer plans in drug and cosmetic establishments is a comparatively new phase for the management of many firms in the industry, although some employers have for many years operated such programs without the help of labor organizations. At the outbreak of World War II, relatively few union agreements made provisions for welfare and old-age pensions. During the wartime, the Government wage stabilization program limited the amount of wage increase which employers could grant, but permitted the adoption of reasonable employee insurance and pension benefits. Further, favorable income tax regulations applicable to employers who set up approved plans also contributed to the growth of such programs.

More businessmen in the drug and cosmetic industry than ever before will be faced with installation of pensions. And there is a growing awareness of the significance of pension planning for workers. This attitude has developed because insecurity in old-age has become a basic problem of American workers. Employees in the drug industry like others have been unable to save or invest enough funds for their old age. Thus, workers in the drug industry, in spite of their efforts, are retired from active employment without adequate funds to meet their needs.

Interest in pension plans has been spurred by the absence of health and disability benefit provisions of union contracts and by the inadequacy of retirement and survivors' benefits currently paid under the Social Security Act. Through negotiations, labor organizations and workers seek to supplement benefits under the SSA, to secure additional types of benefits, and to make provision for special benefits to meet conditions that exist within the drug or cosmetic establishment, firm, or industry.

There can be little doubt that management in this industry will sooner or later be faced with the problem. It is probably true that many drug and cosmetic establishments employ less than 100 people. It is probably true that most employees receive good wages and share reasonably good working conditions. As a result, should employers be forced to install pension plans, or will management take the initiative to adopt such plans?

The Bureau of Labor Statistics indicates that "more than 3 million workers—over twice the number in 1947—were covered by some type of health, welfare, and/or retirement benefit plan under collective bargaining agreement by the middle of 1948."

Many industries have already adopted pension plans. Examples are clothing, chemical, paper, mining, textile, building trades, fur and leather, electrical, machinery, food-products, automobile, power, and communications. While it is not necessary to contrast all of such pension plans in detail, it is interesting to note that pension planning is expanding all the time.

What does a pension plan mean to the employer in

PLANS FOR EMPLOYEES

By Robley D. Stevens, J. D.

this industry? How should the problem be approached? How much will it cost? How much pension benefit will be allocated to workers? Will the pension plan exclude the Social Security benefits? What workers will be eligible? Why should drug and cosmetic management have pensions? What are advantages of pension plans?

These and other questions should be asked by employers in the drug industry for obvious reasons.

Probably the major interest of employers in this industry is to increase efficiency by pensioning older workers and attracting new ones. Efficiency can also be held at a higher level through employees knowing that through years of loyal service they will earn pensions. While bargaining on pensions may not be necessary in this industry, it may be found desirable if there is a labor organization involved.

The National Labor Relations Board's conclusion that retirement and pension plans are subject to matters concerning which the employer must bargain with the statutory representative of its employees was upheld by the Court of Appeals for the Seventh Circuit in the Inland Steel Co. v. NLRB, 170 F. 2d 247. The court held that all retirement and pension plans, regardless of structure, are within the identical bargaining mandates of the original and amended acts which require the employer to bargain collectively with the representative of his employees, i.e. the exclusive representative designated to bargain for them, "in respect to rates of pay, wages, hours of employment, or other conditions of employment." In other words, the court agreed with the NLRB's view that while these provisions do not specifically refer to the matter of retirement and pensions, benefits accruing to employees from such plans are clearly within the statutory concepts of "wages" and "conditions of employment" when viewed in the light of the purposes of the act.

One of the most important questions which management must consider is "Who pays?" The answer to that question will probably never be settled. Thus this controversy will continually expand in view of the fact that all circumstances cannot be anticipated. However, it is reasonable to conclude that all parties involved will want sufficient flexibility in the plan to adjust the so-called costs.

There can be no doubt that a lawyer and accountant should be consulted by management when considering the adoption of a pension plan. Such counsel can be helpful throughout the development because the following laws and regulations may affect a given pension plan: Income Taxes, Social Security Taxes, Unemployment Taxes, Government contracts, Taft-Hartley Act, 1947, Fair Labor Standards Amendments of 1949, Securities and Exchange Act, Insurance laws etc.

Management must decide who will be eligible for the proposed pension plan. In other words, should the plan cover all employees or only those under a collective bargaining contract? Should eligibility for participation in a pension plan be based upon service, age, or upon union membership? Should employees entering a drug establishment employment over 45 years of age be entitled to join the plan?

Another important matter which management has to consider is the question of qualifications for retire-

(Continued on page 724)

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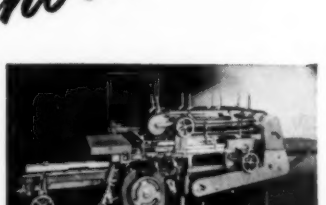

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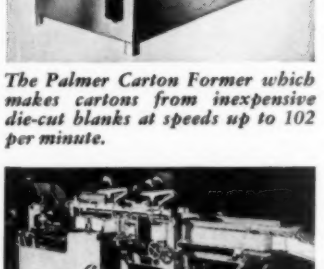

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PACKAGING AND SELLING

SO BIG AND NO BIGGER

The American public has generally looked with suspicion at bigness in business. This country has historically feared the human inclination to abuse power and strength and has always felt more at ease when any citizen who approached the point of unusual power for a sustained period was cut down to a more comfortable size. This has been the basis for public approval in anti-monopoly campaigns and until very recently any politician of any party knew that this was a sure fire formula for majority public approval.

Many people in this country, however, are beginning to sense a very strong change in the public's fear of monopoly in business. This has recently been brought out in a number of anti-monoploy suits or threats of suits against such leading corporations as du Pont, and industries such as the steel industry, and culminating in emphatic public disapproval in the current A & P episode.

The reason for this change in public sentiment undoubtedly lies in the fact that the public generally has come to recognize that at least the majority of the policy makers now running huge enterprises have acquired a very strong sense of public responsibility and an extremely sensitive regard and fear of unfavorable public opinion. In addition to this there is dawning recognition that we have just finished fighting a successful war because, for more than any other one reason we have the supreme industrial capacity in big business to do this job. Still further the American public has a very keen sense of what research is accomplishing, the way in which it is adding to their comfort and security and the absolute need for research in this very upset world. They know that only the largest enterprises can continue the kind of research and the volume of research that is needed.

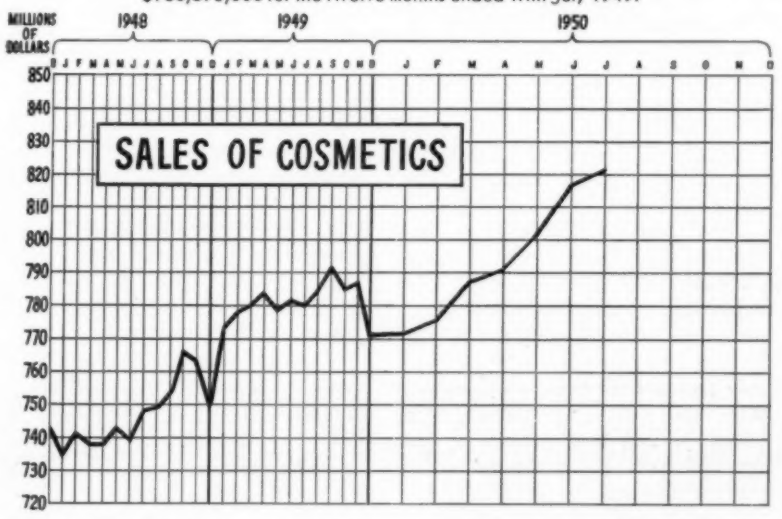
Just about the time that the American public appears to be completely revising its old ideas about the danger of size in business, a new development appears to be taking place in business growth and expansion that may possibly completely put in the discard this whole issue and create new problems in this particular social philosophy. It seems evident that one of the principal ways of further business expansion will be along the lines of the combined enterprise in which two or more completely separated enterprises combine their talents for a more effective exploitation of a new idea.

This development is best illustrated by the recent incorporation of Chemstrand to produce and sell a new synthetic fiber. This corporation, which was jointly formed and is jointly owned by Monsanto and American Viscose, provides the happy combination of the specialized research of these two great companies, the ability of Monsanto to produce and do research in the raw materials needed and the experience and ability of Viscose to contribute specialized production technique and marketing know-how. It is surprising how many similar companies have been developed in the last several years without exciting very much comment because this is really a brand new philosophy in American industrial development.

We have seen such companies as Eastman Kodak, Dow, Corning Glass and many others joining in combined enterprises where each side has been able to contribute talent, experience and resources which would have been unavailable in part to either company if it had ventured alone.

This theory is not restricted to manufacturing because we have right now evidence in Liggett's plan to join the Owl Drug Co. with a leading food super-market in a new store which is a joint enterprise of these two diversified retail interests a possible new trend in marketing. This conception of joining talents, experience and resources has so many appealing qualities in so many different directions that it could

Retail sales of cosmetics for the twelve months ended with July 1950 totaled $822,837,000. This compares with $817,145,000 for the twelve months ended with July 1950 and with $780,695,000 for the twelve months ended with July 1949.



very easily becomean American phenomenon and take this country by storm.

Our research in many fields, but particularly in chemistry and electronics, is gathering so much momentum that in some cases products of very unusual merit and a large number of potentials are shelved simply because of the considerable number of products of equal merit awaiting their turn for the available time and resources of the producer.

Perhaps also this development will save business by diverting some of the growth away from the main body to a separate entity in cases where the relentless pressure of unusual success is forcing a company to attain a size and a volume percentage in its industry which the public, in spite of its newfound wisdom, will still find latent and inherent reasons to fear.

Men's Toiletries

It looks as if men's toiletries have completed the long downward cycle of the last three years and are beginning to move upward again, once more reaching for the war-time peak which various estimates set at around $50,000,000 at retail prices for all classes and categories of men's cosmetic preparations.

Part of the reason for this probably is that the disfavor into which men's toiletries fell as a gift product after too lavish preference is running its course, and after an absence of two or three years, women are again turning to these cosmetics as an easy and satisfactory way to buy men's presents. Another reason is that department store buyers, recalling the way in which the G. I.'s and Navy boys went all out for these products, and reading that we are to have 3,000,000 men in the Army and Navy, are stocking up with increased orders for this anticipated market.

There has been very little change in development work in men's toiletries during these last three hard years, either in new packaging, new products and new lines. Most of the established manufacturers in the higher priced or prestige range have brought out a plain or utility bottle for repeat purchases which sell for $1.00 and there has been an unquestioned increase, although a small one, in deodorant sales under men's labels.

According to the girls behind the retail counter, there is increasing activity in men's purchases in a direction which should receive more careful thought by manufacturers of these products. In a survey of several leading department stores, we were told by girls behind the counter that there has been a notable increase in the number of men who have come to their counter to purchase hair dye. These girls say that very often the men will be embarrassed and evasive, but they finally get around to the product they wish to buy.

There has been a great deal of discussion in the last few years about the employment problem of men over 40. This is a particularly severe problem for men over 50. Employment Counsellors and employment agencies say that men in this classification may have all the vigor of a much younger man, have excellent experience and accomplishments and yet this advantage is a complete bar to employment in the vast majority of cases. Our information is that there are quite a substantial number of men in this category and there are a far larger number of men in jobs of various kinds with various degrees of uncertainty in employment. It would be natural that these men would seek by all possible means to eliminate obvious indications of their age. A further study of ths market may indicate a substantial market for this industry to investigate.

Good Taste and Smell

A very considerable number of packaged consumer products and quite a number of entire industries depend for their success upon an appeal to the two human senses, that of taste and that of smell. The leading success of any product in these two industries is very largely determined by the company's skill or luck in winning public favor through an appeal of one of these two senses.

In spite of the predominant importance of these two factors, very little has been done in the way of discovering a scientific appraisal of taste value or odor value from the view-point of public approval. While this last generation has witnessed a very notable achievement in chemical research, which has made available many new raw materials and chemical specialties which would substantially increase the number and variations allowable in developing taste or odor products, these industries have practically stood still in advancing studies of consumer preference and have depended upon the taster in the food industry and the perfumer in the odor industry for the determination of values and market ability in products of this sort.

There have been many efforts to develop panels of various sorts in these industries, and during the last several years the use of panels of all kinds has become very popular in the perfume and cosmetic business. By-and-large these panels have been an illusion and a snare and more often misleading than useful. The reason for this undoubtedly lies in the fact that these panels have been haphazardly developed, usually taken from the women available within any one organization or groups of women such as beauty editors or groups selected from personal friends and neighbors. Almost as often this panel has been reduced to the president's wife.

The trouble with these panels is that there has been no way of determining whether the panel members were gifted in any particular way in the average sense of smell or sense of taste, and certainly these people have rarely had what might be called a trained or educated sense of smell or taste.

There is developing in industry a formula or procedure for developing a panel which, as time goes on and this procedure is perfected, will undoubtedly have great value to all of the industries concerned with taste and smell and which will improve the products depending upon these two sensory factors. In a sense these panels are being developed along the very same lines on which the perfumer and the food taster is selected and trained.

The selection, of course, is nowhere near as precise and the training is considerably abbreviated. Nevertheless, the net result is a competent panel because these people are selected because of their good fortune in having extra sensory perception, and then these people are given some training so that they have a pretty good idea of what they are doing.

One leading perfume company has worked out a panel among the female employees in its organization who prove by test to have a perceptive sense of smell. This panel, continually sampled with unmarked bottles, has over a period of time, reached the point where it can give a surprisingly uniform appraisal on perfume quality.

A recent issue of the Wall Street Journal contained a very interesting article on the procedure used by the Arthur D. Little Co., Inc. and Distillers Corp.-Seagram, Ltd. each of which has worked out an effective method of

flavor examination and appraisal and each of which is doing a considerable amount of outside research and appraisal for other kinds of companies where flavor is an important consideration in consumer approval.

Seagram uses a panel of 10 tasters. These panel members have been selected with great care and have a much more acute taste than the average person. These tasters are selected from every branch of the company's personnel. One, for instance, came from the shipping department. This panel is given a special training course in which they taste various flavors over and over again until their sense of taste and their taste memory and ability to make comparisons have been sharpened. This panel works under rigidly controlled atmospheric conditions in an air conditioned room where the temperature is always the same. The room is decorated in a neutral color and the tasters work in separate booths so that they can't be influenced by other members. The product tasted is always in the same amount and always at the same temperature.

The Arthur D. Little Co. makes use of chemical analysis as well as tasting boards. This research firm has worked out a graphic method of representing flavors so that different ones can be easily compared. The relative contribution to the flavor of each component is measured and results are pictured in a "flavor profile."

Why Not a Premium Market

This will be a big year for the premium makers. Some 11,000 manufacturers now push sales with the use of premiums, and this use of premiums is said to be about 40 per cent higher than the total of just three years ago. Premium users today include a wide variety of packaged manufactured products, including such goods as soaps, biscuits, cereals, cigarettes, electrical appliances, etc.

This industry has had little or no participation in the billion and a half dollars give-away industry. It did have one fling during the early '30's when Procter & Gamble distributed about 20,000,000 vials of perfume with a soap offer for one cent extra. According to reports, this was a very successful sale and this perfume a very popular premium.

Some attempts were made later with a lipstick, but this did not seem to go over quite as well.

Nevertheless, it is strange that in view of the almost universal use of certain types of cosmetics and their great popularity that certain fields of premium use have not developed from this industry, giving it some sort of participation in these billion and a half dollar sales.

Consumer Franchise

Advertising agencies and the big publishers are rapidly becoming enamored by the idea that advertising is headed for a terrific expansion in dollar expenditures. Self-service retailing is the little boy blue to which credit and adoration is extended.

At a meeting of the A.A.A.A. some time ago a prominent member of the Advertising Agency Association asked members a very pertinent question. Said he, "With the disappearance of the retail clerk, who will sell the goods in America?" Of course, everyone present needed no prompting but guessed the answer immediately, that is consumer advertising.

Advertising folks are going to hear a great deal more about a magic word called "consumer franchise." One leading newspaper is already telling its prospects in vigorous language how to acquire a consumer franchise in their territory. Just recently the advertising director of a great metropolitan newspaper said in a talk, "You must know that the only dealer influence that you do not have to buy over and over again is consumer influence—people asking to buy your wares at the merchant store."

There still seems to be quite a few retailers in the United States, among them a considerable number of very respectable business enterprises, where the directing heads have very positively stated that they have no intention and see no need to become an automat or to toss overboard personal selling. Even among a number of the powerful combines, which are growing so vigorously on the formula of self-service, there are quite a few who have learned that by assigning favorable or unfavorable display positions and other similar methods of point-of-sale selling within the control of even the owner of the vending machine, that they can play the full scale with anybody's consumer franchise from deep base to high treble as easily as a kid can handle a harmonica.

It is also becoming a matter of serious thought for some classes of retailers, and the chain and independent drug store must be included in this group, that the logical and inevitable conclusion to the theory of consumer franchise is that the manufacturer who possesses this sort of thing does not have to give a damn about any particular retailer or any class of retailer, but because of the compelling obligations of the consumer franchise and the large number of dollars needed to sustain it, he must make his product available everywhere and anywhere that happens to suit the convenience of the public.

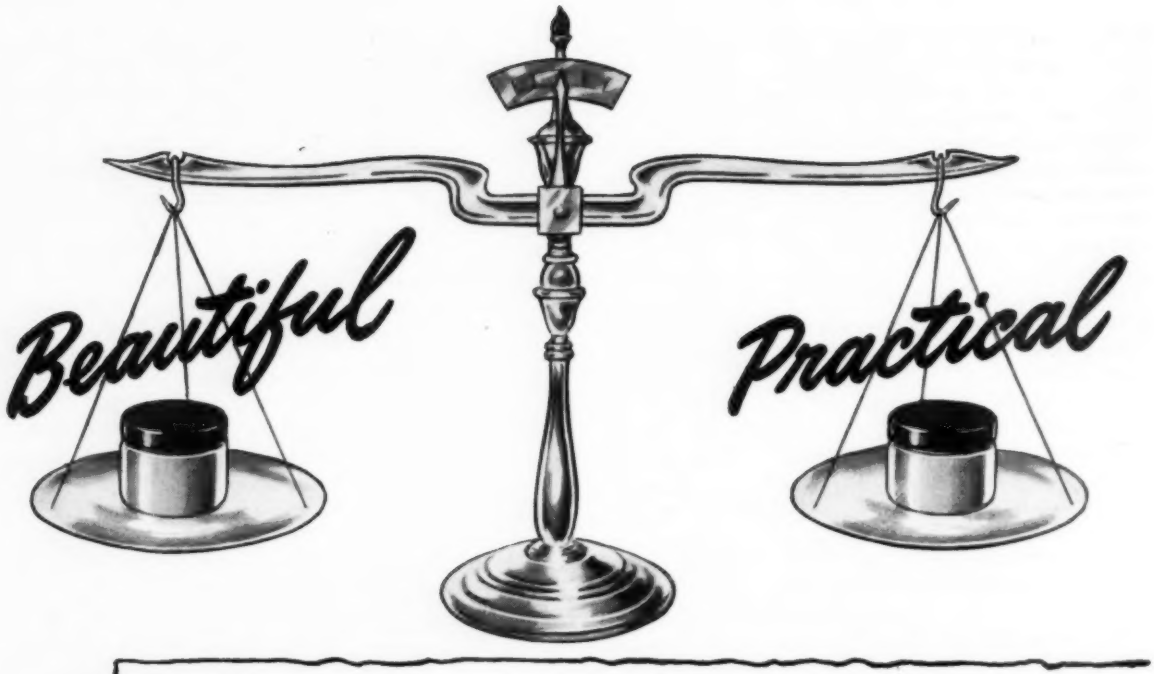
The constantly accelerating movement of so many drug store franchise products into the grocery super-market is the best indication of the fact that there is a law governing consumer franchise which says, in effect, slap your product in the spot nearest and most accessible to the public even if it is a shoeshine store.

The consumer franchise more than anything else probably made it possible for a prevailing condition in the retail trade today when nearly everybody seems to be busting into somebody else's business. There is, of course, such a thing as a consumer franchise and although very few companies, among those who possess it to a very large degree, put it on their books at more than a dollar, the consumer franchise is still the predominant and basic asset of their entire business. But there is no doubt that with typical American enthusiasm this idea is being picked up and carried to ridiculous extremes.

For those manufacturers whose products cannot be classified as a utility or as a low priced convenience product, it would be well for them to keep in mind that self-service, which is now an admittedly rising tide, will find the level where it belongs and will stop there as a percentage of the retail business. It would be well for them to remember that personal selling behind the counter is a basic essential in our kind of economy and that there is not the slightest chance of it disappearing.

It should also be remembered by all manufacturers, whether of the convenience-utility products capable of developing a consumer franchise or the Rolls Royce kind of products, that retail merchants, self-service and otherwise, can take him by the neck and squeeze him dry if they should happen to want to, at any time, without too much trouble. There is always quite a number of competing brands with varying degrees of consumer franchise for this merchant to pick up and carry over the counter.

For those people who do not make convenience utilities but who do make products which, either because of the



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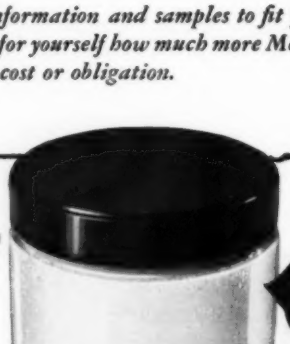
We'll gladly send full information and samples to fit your own products. Then you'll see for yourself how much more MeritSEAL has to offer. There is no cost or obligation.

MeritSEAL—



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price involved or other factors such as style, design, etc., make the inclination to shop and compare important, these people will always find that the intelligent sales cooperation of the retailer is just as important in building their business as anything that could be called consumer franchise. When the two work together in harmony, that manufacturer is usually sitting pretty. When he plays too hard or exclusively on one side of the keyboard, he is usually in for trouble.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of August 1950 as compared with the same period in 1949.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	+16	+4	Minneapolis	+26	+4
Baltimore	+12	0	Milwaukee	+26	+5
Birmingham	+26	+2	Newark	+19	+1
Boston	+15	+7	New York	+16	+1
Chicago	+15	+4	Philadelphia	+17	-1
Cincinnati	+26	+2	Pittsburgh	+24	+4
Cleveland	+19	+8	Providence	+21	+2
Dallas	X	+1	St. Louis	+13	-7
Detroit	+21	+6	San Francisco	+16	+3
Los Angeles	+9	-3	Seattle	+6	+4

Does the Public Want Fancy Packages?

A great part of the trade excitement which accompanied the announcement of the two new Lelong Perfumes is beginning to die down. But perfume producers and distributors as well as leading retailers are still watching this experiment with more intense interest than anything that has occupied their attention for many years.

For those who are not familiar with the way in which the two new Lelong Perfumes were introduced the story is briefly this. These are two, new imported perfumes bottled and completely packaged in France. They are packaged in quite several plain packages. The basic theme of the introduction in the advertisements and the store promotions is that perfume has been too costly for the direct purchase by women, or for free and full use when received as a present. Since it would not be possible to bring out a high quality perfume by saving on the quality of the product, the efforts for economy have been turned toward the package. By the elimination of "silk and ribbons and similar fol-de-rol," as one advertisement stated, it has been possible to reduce the price of this perfume to $9.00 for two ounces.

A recent release from the advertising agency of Irving Serwer, who is handling this account, states the case for this new perfume as follows:

M. Lelong writes from Paris, "Each year we have become increasingly aware of how little perfume American women use compared to French, other European and South American women. I analyzed the situation carefully and decided that in America, price created the problem."

"Since no compromise could be made with my perfumes themselves, how could I find the solution? I made up my mind that *packaging and production costs must be cut to minimum;* so that American women could afford to use the best French perfumes freely and constantly as they should, and would, if rightly priced."

"I assembled the least expensive bottles, cardboard boxes and plain brown paper available. In plain packages that cost a minimum I now offer American women a choice of two magnificent perfumes . . . that compare with the best I ever produced . . . at $9 for two full ounces!"

"Now," continues M. Lelong, "American women will find it possible to buy perfume *for themselves*—and not be forced to wait until some one presents them with perfume for Christmas, Easter or Mother's Day."

It has been the main theme of the Fragrance Foundation, since its founding, that the American public has been educated through the historic style of perfume advertising to consider perfume as a rare and precious thing. The price of perfume has supported this theme. The result has been that a relatively very small percentage of American women purchases perfumes, that is probably not 2 per cent of American women, and that even the gift market upon which perfume predominantly depends has been limited to a relatively small percentage of the women, perhaps not over 5 per cent.

There has been a basic difference of opinion in the industry as to the effect of price upon consumption. A very large majority of the distributors and producers of perfume, who insist that price is not the factor, can point to several vigorous efforts to establish a new perfume on the basis of a medium or low price and consequent failure of these companies. In addition to this, there are a number of perfumes on the market, among which could be included the perfumes of Coty, Bourjois, Hudnut and Faberge, which provide excellent quality in a medium price range. On the other hand, it is a basic factor that cannot be avoided that American women are not using fragrances anything like the way they are using such cosmetics as make-up products, creams and hair preparations. It is also an unescapable fact when American women are using fragrances, they are substituting the much lower priced colognes and toilet waters for perfume use. This very heavy consumption of colognes and toilet waters as compared with perfumes points to a fact which nearly everyone in the industry admits, that a large part of this cologne and toilet water use is for perfume purposes rather than the basically different purpose for which cologne is formulated. This has confused the whole question of fragrance use, both in the retail store in selling fragrances and for the woman customer. This condition could easily lead to a decline in the use of both perfumes and colognes instead of the much larger volume that could be possible if each of these products had their markets and field of usage clearly defined in the minds of consumers and store salesgirls.

At any rate, Lelong's current program can be interpreted as a direct assault on the package which contains any element beyond its simple utility function. Although many famous packages in the perfume trade have complete simplicity and dignity and are free of what could be classified as silk and ribbons and fol-de-rol, nevertheless the perfume industry in particular and cosmetics in general have depended for sales and for their huge volume of gift business very largely on the type of package which goes beyond a simple utility character. For this reason, the entire industry is watching with a great deal of interest to see whether the consumer, and to a lesser extent the retailer, will put the stamp of approval upon a product such as perfume offered at a lower retail price, arrived at with the elimination of extras in packaging.

NEW PRODUCTS AND NEW PACKAGES

ABBOTT LABORATORIES has introduced four vitamin preparations, Optilets, high-potency multiple vitamin tablets containing six synthetic vitamins plus vitamin B_{12}, and Dayalets, tablets which contain eight synthetic vitamins and vitamin B_{12}. Both preparations contain synthetic vitamin A which obviates the possibility of allergic reaction in patients sensitive to fish oils.

The other vitamin preparations are B-Folidox Capsules, which contain Bevidox Concentrate (equivalent to vitamin B_{12}, 25 micrograms, and folic acid, 1.7 mg.) and Bevidox Concentrate Dulcets, a candy medication designed for administration to children. Each tablet contains Bevidox Concentrate equivalent to 10 micrograms of vitamin B_{12}.

Abbott has also prepared Penicillin-Streptomycin Ointment, Veterinary, containing 100,000 units of penicillin G potassium and 50 mg. of streptomycin in a suitable ointment base. It is indicated for udder instillation in the treatment of acute and chronic bovine mastitis due to streptococcus agalactiae and coliform organisms such as escherichia coli.

BIO-RAMO DRUG CO., INC. has announced the preparation of Clari-Fort Tablets, red-coated tablets containing vitamins A, D, B_1, B_2, nicotinamide, folic acid, B_{12}, and C. These tablets have been designed to provide a well rounded, convenient daily vitamin supplement, adequately potent for therapeutic effect where frank deficiency of the more usual vitamins exist.

Bio-Ramo also announces that Rametin Tablets, the first oral crystalline vitamin B_{12} made available to the medical profession, are now provided in a larger potency. Potencies are available in 5 micrograms, 10 micrograms, and the new 30 micrograms.

GEORGE A. BREON & COMPANY is now offering a new brand of p-methylaminoethanolphenol tartrate named Synthenate Tartrate which is described as an effective aid against the common cold. Available only through doctors' prescriptions, this product is supplied in 1 cc. ampuls in boxes of 12's and 25's. The company's medical director states that it is faster than many of the antihistamines, without the side-effects such as nausea and drowsiness.

BROEMMEL PHARMACEUTICALS is ready to distribute Elixir of Rinofed, containing phenobarbital, atropine sulfate, and ephedrine HCl, compounded in a pleasant tasting syrup base. The product is especially adapted for pediatric work.

THE CENTAUR-CALDWELL DIVISION, STERLING DRUG INC. is now distributing Campho-Phenique Powder and Campho-Phenique Liquid in new packages. The powder is being packaged in a tin container, replacing a bottle and carton, and holds two ounces. New wording on the carton holding the bottle for the liquid states that Campho-Phenique is a "Pain-Relieving Antiseptic" and a "Stainless Liquid."

DANA, INC. has prepared a special black and gold Christmas package for their Voodoo perfume in which the bottles are cushioned against scarlet satin.

RICHARD HUDNUT has added a new hair product to their line, Formula A-10 For Men. Combined with massage, this preparation is said to check excessive falling hair, cleanse the scalp of loose dandruff scales; combat scalp fungus and bacteria; bring fresh nourishing blood to the hair roots; and relieve dry scalp.

LEDERLE LABORATORIES have added to their Normocytin line of products a new anti-anemia tablet which combines vitamin B_{12b} and vitamin B_{12}, Folic Acid and hog stomach powder for oral administration. These tablets are for all the megaloblastic anemias including pernicious anemia. They are packaged in bottles of 100 tablets.

MCNEIL LABORATORIES announces the availability of Syntil, a combination of central stimulation and sedation designed to correct central nervous system imbalance. Each tablet contains Syndrox Hydrochloride and Butisol Sodium. The Syndrox has a stimulating effect on higher cerebral centers and imparts a feeling of well-being while Butisol is particularly indicated for daytime sedation.

MILKMAID INC. has created Coloristic Lipstick, a non-smear lipstick, which is said to remain in place for hours, and will not rub off on a cigarette or napkin. The lipstick, which comes in nine Milkmaid shades, is delicately scented and stays within the confines of the lip outline. It can be removed with cream or by washing.

NORTHAM WARREN CORPORATION has introduced Cutex Powder Polish which helps to smooth out ridges that sometimes appear on the nails, stimulates the circulation, and helps promote the growth of strong, healthy nails.

CHAS. PFIZER & CO., INC. has made the antibiotic terramycin available in two forms for ophthalmic therapy and prophylaxis. Crystalline Terramycin Hydrochloride Ophthalmic, a dry mixture of crystalline terramycin hydro-

chloride and sodium borate-sodium chloride buffer, is dispensed in a vial containing the equivalent of 25 mg. of pure terramycin. Crystalline Terramycin Hydrochloride Ophthalmic Ointment, a suspension of terramycin hydrochloride in a petrolatum base is packaged in a three-and-one-half-gram tube. The solution is particularly useful as a prohylaxis prior to surgery, and the ointment in the local treatment of minor eye infections caused by a wide variety of pathogenic organisms.

POND'S EXTRACT COMPANY has repackaged its lipstick in a shiny polished brass case with a cap that tapers into a graceful point. The lipstick shades are the same as before, including Honey, Rascal Red, Beau Bait, Dark Secret, Dither, Heart Throb, Blue Fire, and Black Blaze.

HELENA RUBINSTEIN is introducing a new Silk Velvet Hand Lotion, a non-greasy, non-sticky lotion that contains particles of real silk. This finely textured lotion spreads on evenly and gives the skin a protective invisible coat which guards against chapping and roughness.

SANDOZ PHARMACEUTICALS is marketing Elixir Belladenal, a new preparation designed specifically for spasmolytic action in pediatrics and other cases where the use of tablets and capsules is impractical. Belladenal is useful in controlling spastic states of the digestive tract such as feeding problems in infants and children, spastic colitis, cardiospasm, pylorospasm, peptic ulcer, pseudo-ulcer syndrome and biliary colic, and in spasm of the urogenital tract, such as dysmenorrhea, renal colic.

SCHENLEY LABORATORIES, Inc. announce the availability of Vascutum, a unique and original formula consisting of tablets containing lipotropic agents combined with capillary protective features. The content of choline, inositol, methionine and pyridoxine in Vascutum tends to re-establish normal fat and cholesterol metabolism and serves as a therapeutic and prophylactic aid in interrelated degenerative disease affecting middle aged and elderly patients including liver degeneration, arteriosclerosis and related cardiovascular involvements.

SCHERING CORPORATION has prepared Chlor-Trimeton maleate repeat action tablets. The repeat action is provided by two layers of Chlor-Trimeton maleate of 4 mg. each. The outside coating is intended to produce immediate symptomatic relief lasting about 4 to 6 hours, and the special inner coating is designed to release the second dose in the core after about 3 to 6 hours. It is indicated especially when longer effect from a single tablet is required, in symptomatic relief of manifestations of allergic states, such as hay fever, vasomotor rhinitis, urticaria, allergic eczema, angioedema, serum stickness, and drug sensitivity.

Schering has also prepared Trimeton maleate lotion with prepared Neocalamine, a bland, delicately scented, flesh colored lotion for the relief of itching due to poision ivy and poison oak, insect bites, sunburn, and other minor irritations of the skin.

SHARP & DOHME, INC. has released two new products, Ampave Tablets, a balanced combination of two potent cerebral stimulants for the control of narcolepsy and depressive states, and NPH Insulin, a new modified Insulin that increases both the stability and duration of the blood sugar-lowering effects in the treatment of diabetes mellitus.

Effective in increasing energy and in promoting a feeling of well being, Ampave contains amphetamine phosphate, a drug valuable for treatment of mild depression of psychogenic origin and caffeine, a psychic-sensory stimulant that allays drowsiness and produces a clearer, faster thought flow.

NPH Insulin, a combination of protamine and zinc-Insulin crystals, can be substituted for regular Insulin with fewer night reactions and instance of high urinary sugar levels during the day. Effective for 28 to 30 hours, NPH Insulin usually requires only one dose daily, thus minimizing inconvenience and discomfort.

SMITH, KLINE & FRENCH LABORATORIES have introduced Eskacillin-Sulfas, for the prevention and treatment of the numerous infections caused by organisms sensitive to the action of penicillin or the sulfonamides. It is recommended in those numerous infections where penicillin-sensitive, or sulfonamide-sensitive organisms, or both, are present, such as pneumococcus, hemolytic streptococcus, staphylococcus, gonococcus, some Salmonella and Shigella organisms and coliform organisms.

E. R. SQUIBB & SONS also announces the distribution of NPH Insulin, which is supplied in two strengths, designated as U-40 and U-80, containing respectively 40 units and 80 units per cc. in 10-cc. square vials.

STANLEY DRUG PRODUCTS is offering a new Rubicap product, Rubicaps with Liver and Iron. It is suggested for special cases of anemia and fatigue, where liver and iron are needed.

SUTLIFF & CASE COMPANY, INC. has announced the availability of Casate Sodium (brand of Sodium Gentisate) 0.5 gm. tablets for the treatment of arthritic and rheumatic conditions.

WALKER VITAMIN PRODUCTS, INC. has introduced three new products, Mensalin, for relief from premenstrual tension; Adcets, vitamin spheres for children; and Glutamicol for treating mental retardation. Mensalin provides relief from such premenstrual symptoms as nervous tension, breast tenderness, low-back pain, and headache and is believed to exert beneficial action by combating edema and by restoring a sense of calm and well-being.

Adcets combine vitamins A, D, and C, important for infant and child nutrition, in a small, round, candy-like product. These orange spheres each contain 5,000 units vitamin A palmitate, 1,000 units natural vitamin D, and 50 mg. ascorbic.

Glutamicol, a crystalline powder containing glutamic acid and sodium citrate, is believed to exert a specific favorable influence on brain function in cases of mentally retarded children. The powder may be mixed with fruit juice, milk or semisolid foods such as puddings and cereals.

*Fully protected by U. S. Patent 2,491,947. Foreign patents pending.

a patented* method for printing polyethylene bottles

Color engraving — Hot stamping Patented Process — Exclusively ours!

Assures a permanent, colorfast, debossed, color wiped-in effect on polyethylene bottles, to a high luster.

Alcohol proof — cannot rub off.

Superior reproduction facilities for 250,000 per day.

All colors including gold and silver.

Registers to the utmost detail, flat or design motif.

Your inquiries respectfully solicited.

Modern Art Printing Company

PLASTIC DECORATIVE SPECIALISTS

67-73 KENT STREET, BROOKLYN 22, N.Y.

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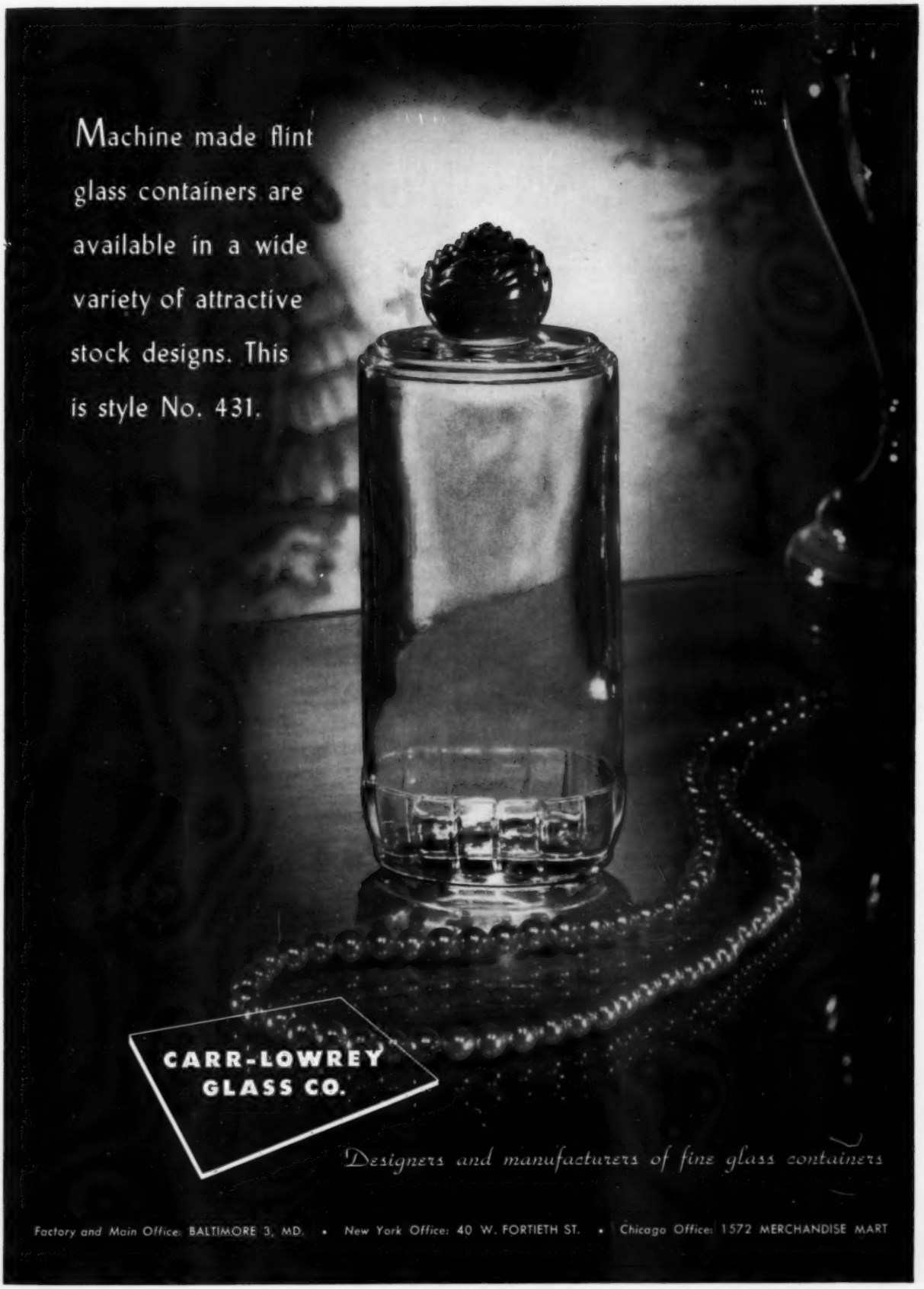
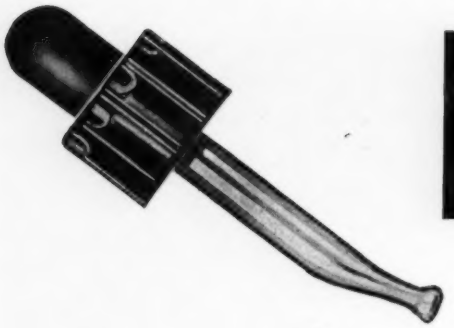
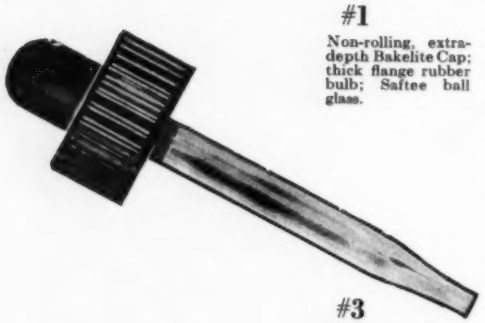

Machine made flint glass containers are available in a wide variety of attractive stock designs. This is style No. 431.
CARR-LOWREY GLASS CO.
Designers and manufacturers of fine glass containers
Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: 1572 MERCHANDISE MART

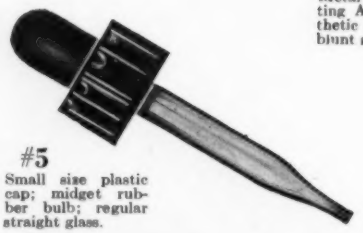


#1
Non-rolling, extra-depth Bakelite Cap; thick flange rubber bulb; Saftee ball glass.



#3
Regular plastic cap; thin flange rubber bulb; semi-blunt glass.

#4
Metal cap; oil-resisting Amekine synthetic rubber bulb; blunt glass.



#5
Small size plastic cap; midget rubber bulb; regular straight glass.

New Perfection

DROPPING PARTS

"Repeat-Sale Insurance" for Liquid Preparations

The New Perfection line of functionally designed dropping parts gives satisfaction where satisfaction counts—in the hands of the user. To make sure the customer's first reaction to your product is 100% favorable, specify New Perfection. Our rigid inspection system assures the cleanliness and uniform high quality of every shipment.

New Perfection dropping parts will fit your bottle or can be furnished in combination with our Modernistic bottles in Amber, Blue, Green or Clear glass. Bottle sizes—2 cc, ⅛, ¼, ½, 1 and 2 oz.

NEW PERFECTION DROPPER GLASSES

CALIBRATED

IN COLOR

This inexpensive extra adds welcome convenience to the use of your product. Accurate calibration in any color marks the specific dosage indicated. Or, your firm name or trade-mark may be imprinted.

#2
Non-rolling, extra-depth Bakelite cap; thick flange rubber bulb; special bent glass (CALIBRATED IN COLOR).

Improved bottle shape. Designed to lie flat for convenient labeling. Front provides ample label space.

IN ADDITION TO NATURAL RUBBER BULBS FOR GENERAL USES

AMEKINE (OIL-RESISTING) Synthetic Rubber Bulbs

are recommended for use with oil preparations, such as nose and ear drops and vitamin products. Even after long exposure to oil, Amekine closely retains its original shape and functions perfectly.

PENNSYLVANIA
GLASS PRODUCTS CO. INC.

"Glass Goods of the Better Kind"

430 N. CRAIG ST. • PITTSBURGH (13), PA., U.S.A.

14 *ways to pack appeal*

in low-cost containers!

These fourteen container ideas give you a hint of how Scovill's vast production facilities can solve your container problem with utmost beauty and utility . . . *at no sacrifice of economy.*

We're geared to quickly adapt to your special design needs this wide range of ready-made items . . . in plain, satin, or highly-finished metals. If you do not see an answer to your problem here, our engineering staff will create unique, new effects for you . . . yet keep a close eye on cost.

Just mail the coupon, checking the number or numbers of interest to you, or stating your problem, and leave the rest to us!

SCOVILL MANUFACTURING COMPANY
Drug and Cosmetic Container Division
63 Mill Street, Waterbury 20, Conn.

Please send full details of your design and manufacturing facilities.
I am interested in:

1 & 2 ☐ Perfume Holder
3 ☐ Bobby Pin Holder
4 ☐ Cigarette Lighter
5 ☐ Powder Dispenser
6 ☐ Powder Pencil
7 ☐ Powder Box
8 ☐ Toothbrush Container
9 ☐ Shaving Brush Container
10 ☐ Lotion Pump
11 ☐ Lotion Dispenser
12 ☐ Concealed Thread Jar Cap
13 ☐ Concealed Thread Bottle Cap
14 ☐ Serum Clamp

My problem is none of the above, but . . . . . .

. . . . . .

NAME . . . . . .

COMPANY . . . . . .

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CITY . . . . . STATE . . . . .

Best-selling brands in leading stores have

SCOVILL-MADE *Containers*

A PRODUCT OF SCOVILL

When you want the BEST go to the BEST

And for Packaging it's GLASS

Nothing is more important in the packaging of your products than the protection of their purity, strength and other qualities. High in chemical durability, the glass package does not change your products. It will not leak, rust nor absorb moisture. Easy to open, easy to use, easy to reseal, it makes the most convenient package. The glass package may be transparent or not as required. It lends itself to individuality in size and shape, hence is adaptable to any product. Preferred by consumers because it is safe, sanitary and convenient . . . by retailers because of its sales and merchandising advantages. Select your source of supply for glass packages as carefully as you would a surgeon, attorney or other specialist. Anchor Hocking Glass Corporation, Lancaster, Ohio.

Anchorglass*

OVALS

For frequently used household products like oils and liquid detergents, attractive *Anchorglass* Ovals appeal to housewives. That's because these ovals are easy to hold, easy to open—to pour from—to reseal and store. You'll like *Anchorglass* Ovals for their outstanding production line performance. Uniform in all dimensions, smooth sides prevent twisting and jamming—flat bottoms prevent tipping. They're tough and strong because glass is evenly distributed. Proper annealing and constant tests and inspections keep them right. *Anchorglass* Ovals are available in crystal, green or amber glass, in 9 capacities from 1 to 32 ounces.

ANCHOR

PLASTICAP*

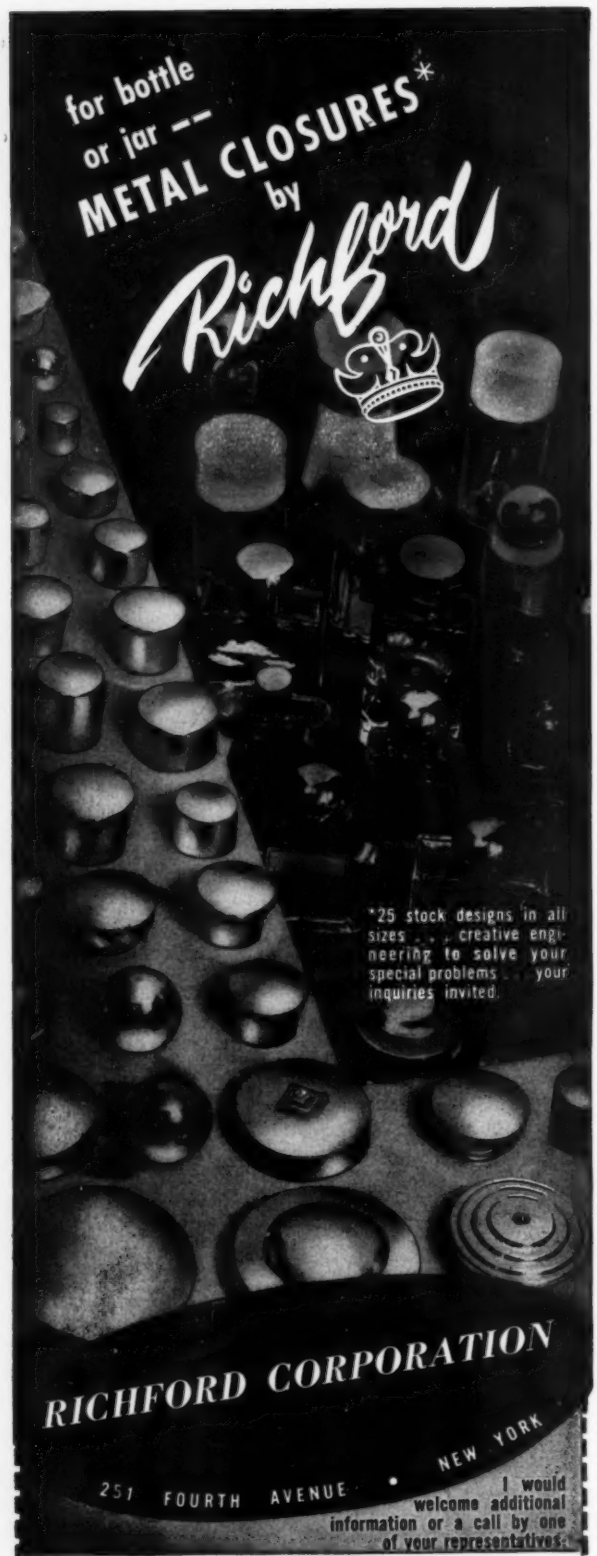
The *Anchor* Plasticap is distinguished by a patented liner retaining ledge and recess. This feature holds the liner permanently captive without the necessity for adhesives which frequently crystallize, release the liner and contaminate contents. It permits the use of full-size liners that completely cover the glass sealing surface. It prevents buckling, wrinkling or creeping of liners—permits their free rotation, thus preventing liner damage in application. And withal, Plasticaps are impervious to the action of most acids, alkalies, oils, alcohol and other destructive agents. *Anchor* Molded Caps are available in 7 sizes from 18 to 33 mm. Let us tell you more about the advantages and economies of *Anchorglass* Containers and *Anchor* Molded Caps.

*Reg. U. S. Pat. Off.

For the BEST in Glass Packaging *it's*

ANCHOR HOCKING

"THE MOST FAMOUS NAME IN GLASS!"


for bottle
or jar --
METAL CLOSURES*
by
Richford
*25 stock designs in all sizes . . . creative engineering to solve your special problems . . . your inquiries invited.
RICHFORD CORPORATION
251 FOURTH AVENUE • NEW YORK
I would welcome additional information or a call by one of your representatives.

NAME .....

ADDRESS .....

CITY ..... ZONE..... STATE .....

Lusteroid vials and tubes offer all these advantages in modern plastic containers to meet your standard or special needs. Sizes from ¼" to 1½" in diameter and lengths up to 6". Cork, slip-on or screw-cap closures.

Write for samples and new low prices today.

LUSTEROID

Lusteroid Container Company, Inc.
10 West Parker Avenue, Maplewood, New Jersey

Eye make-up containers

Hinged Plastic Mascara Box with Mirror

Also Plastic Jars in ½, 1, 2 and 3 oz. sizes for eye creams, pads, etc.

Eye Shadow Box

A Propel and Repel Eye Pencil complete with choice of six crayon shades.

CALUMET MANUFACTURING CO., INC.

Sam Schwartzman, Pres.

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METAL CONTAINERS *and* CLOSURES
by
BRIDGEPORT

Vanities
Jar Caps
Bottle Caps
Drawn Talc Containers
Powder Boxes
Perfume Vial Cases and Caps
Lip Brushes
Dry and Paste Rouge Cases
Lipstick Containers --- Swivel, Slide, Automatic

and

Other Special Metal Products for the Cosmetic Industry

THE BRIDGEPORT METAL GOODS MFG. CO.

Established in 1909

BRIDGEPORT — CONNECTICUT

Is there . . . . . an idea for you in the ONE that caught your eye?

Think of bottles—your bottles—capped in attractive color! Pharmacists, wholesalers, retailers, and manufacturers find the use of distinctive color invaluable in identifying and impressing their products on the public mind. Wholesalers find drugs and cosmetics in bottles capped with color easier to sell—because retailers know the eye appeal of color as a merchandising force of significant value.

Take a fresh look at closures of Plaskon Molded Color! Leaders in the drug, cosmetic and pharmaceutical fields are featuring them in a wide range of colors and a broad selection of styles. These modern closures attract the eye with *practical* colors—colors that are solid, permanent, chip-proof. And the plastic is resistant to solvents, greases, oils, dilute acids and alkalies—with a non-porous finish that is smooth and friendly to the touch. If you wish, you can even have an exclusive shape in your caps—thanks to the moldability of Plaskon Molded Color. Contact your supplier now for all of the facts!

Your package can help sell your product . . . cap it with

PLASKON
MOLDED COLOR

PLASKON DIVISION • LIBBEY • OWENS • FORD GLASS COMPANY
2110 Sylvan Avenue • Toledo 6, Ohio
In Canada: Canadian Industries, Ltd., Montreal, P. Q.
Branch Offices: Boston, Chicago, New York, Los Angeles, Rochester
Manufacturers of Molding Compounds, Resin Glues, Coating Resins

NEWS...

Van Gorder Heads Health Comm.

George Van Gorder, president of McKesson & Robbins, Inc., has accepted the chairmanship of the finance committee of the Health Information Foundation, according to John G. Searle, chairman of the board of directors. Mr. Van Gorder, who is a director of the Foundation, has also agreed to serve on the executive committee.

GEORGE VAN GORDER

Armour Appointments

Dr. Edwin E. Hays has been appointed assistant general manager and director of research of the research division, Armour and Company, according to Victor Conquest, general manager of the division. Other changes in the division include the appointments of Dr. J. D. Porsche as director of research and development at theArmour 31st St. Auxiliaries; Dr. James B. Lesh as director of biochemical research, succeeding Dr. Hayes; and Myron D. Grossnickle as assistant to Dr. Lesh.

On Sharp & Dohme Research Staff

Riley McGaughran and Duane C. Hess have been added to the medical research staff of Sharp & Dohme, Inc. as research associates, according to Dr. L. Earle Arnow, director of research.

To Continue Bourjois Publicity

Rosemary Sheehan and David Quinlan have been retained by Bourjois, Inc. for publicity and promotion of the perfumes Evening in Paris, Mais Oui, Beau Belle and Endearing.

Sterling Drug Appoints Stewart

Alexander M. Stewart has been named manager of chain store sales for the major product divisions of Sterling Drug Inc., according to James Hill, Jr., president, and Herman A. Fellman has been appointed assistant manager. Mr. Stewart has been connected with chain store sales for 35 years and, since 1942, has headed chain store sales for the Bayer and Watkins divisions of the company. In his new capacity, he will also be concerned with similar sales of the Phillips, Centaur-Caldwell and Cummer divisions.

Mr. Fellman has been associated with Sterling since 1926 as sales representative, sales supervisor and, more recently, as manager of chain store sales for the Phillips division.

ALEXANDER M. STEWART

Tintair to Sponsor TV, Radio Shows

Tintair will set a new record in the cosmetic industry this year in respect to advertising, according to Martin L. Straus II, president and chairman of the board of Bymart, Inc. With the signing of W. Somerset Maugham, British author, and Frank Sinatra to head up the television and radio shows time and talent charges for both programs from October 18 to December 31 alone, will exceed similar expenditures by all hair tints and hair coloring preparations during 1950, states Mr. Straus.

Steele Appointed By Dreyer

Frank R. Steele has been appointed special sales representative for P. R. Dreyer Inc. in Chicago and surrounding territory and succeeds William H. Schutte who represented the company in Chicago for the past thirty years.

It was necessary for Mr. Schutte to relinquish this position because his other interests have become so voluminous and require a great proportion of his time and effort.

Cowley Promoted by Nopco

Alan B. Cowley has been appointed advertising manager of Nopco Chemical Company's vitamin division. His new duties will consist of supervising advertising and sales promotion of Nopco's agricultural department for the feed industry and Vitex Laboratories for the dairy industry. James C. Stern, formerly with the Gardner Advertising Company, has replaced Mr. Cowley as assistant advertising manager forNopco.

Underwood with Pepsodent Div.

Raymond F. Underwood has been named vice-president and general sales manager of the Pepsodent division of Lever Brothers Company, according to C. T. Lipscomb, Jr., president.

RAYMOND F. UNDERWOOD

Squibb Opens Detroit Sales Div.

Executives of E. R. Squibb & Sons, along with salesmen and professional service representatives celebrated the opening of the newest sales division (Detroit) by attending an "Early Bird" breakfast at the Book-Cadillac Hotel on September 30. James T. McAloon, manager of the new Squibb Detroit sales division, presided at the breakfast and meeting. Attending both were J. J. Toohy, vice-president and general sales manager, William L. Arscott, field sales manager; C. E. Heminger, Squibb Cleveland division asales manager, and Paul A. Freeman, Chicago division sales manager.

Reorganizes Sales Department

J. K. Flint, vice-president of Flint, Eaton & Company, has been named to the additional position of director of sales as a result of the reorganization of the company's sales department, while A. L. Harding has been appointed field sales manager and C. R. Kemp continues as director of professional relations.

● *And uniform savings for you!* For any variation in the beeswax base of your chemical, pharmaceutical or cosmetic preparations can cause additional expense in your laboratory and plant—and lost sales at your dealers' counters.

Natural refined beeswax is a small fraction of your total product cost. Yet the unchanging purity, texture and whiteness of Beehive Brand Beeswax can be the big help in keeping your product up to the high standards you have set.

FREE CONSULTATION SERVICE

The experimental data and practical manufacturing experience of nearly a hundred years' specialization in beeswax and beeswax compounds are at your service without cost or obligation. Write us about your beeswax problems.

WILL & BAUMER
Candle Co., Inc.
Syracuse, N. Y. **Established 1855**

SPERMACETI • CERESINE • RED OIL • YELLOW BEESWAX • COMPOSITION WAXES • STEARIC ACID • HYDISTEAR

Sandoz Regional Conferences

The Sandoz Pharmaceuticals executive staff held a series of sales and educational conferences for the field staff from September 29 through October 23. Dr. C. Henze, general manager, who recently returned from Denmark, reported on the papers which were given at the International Physiologic Congress in Copenhagen. S. M. Fossel, assistant general manager, discussed a number of problems pertinent to Sandoz sales and sales promotion and J. A. Nussle, advertising manager, outlined the forthcoming advertising program. Each of the other executives spoke on subjects pertaining to their special fields.

Sandoz executive staff planning regional conferences which were held last month. Left to right are: Dr. C. Henze, general manager; S. M. Fossel, assistant general manager; H. Davis, professional service manager; K. Ericson, research department; J. Garbat, promotion department; E. W. Agre, distribution department; C. H. Paul, sales manager; J. A. Nussle, advertising manager; and B. Tinkess, promotion department.

Cole Chem. Co. to Build Addition

Cole Chemical Company plans to double its productive capacity by erecting a two-story addition to the office and laboratory building at 3721-27 Laclede Ave. in St. Louis, according to B. L. Cole, president. Laboratory equipment and manufacturing machinery will be installed in the expanded plant which is scheduled for operation by January first.

Connor Becomes V.P. of Merck

John T. Connor, who will continue as secretary and counsel, has been named vice-president of Merck & Co., Inc. by the board of directors, according to

JOHN T. CONNOR

James J. Kerrigan, president. Prior to joining the company in 1947, Mr. Connor was special assistant to Secretary of the Navy James Forrestal.

Named Trustee of Mass. College

Hart Harris, Jr., New England representative for S. B. Penick and Company has been appointed to the board of trustees of the Massachusetts College of Pharmacy.

Dr. Roth Joins Comm. Solvents

Dr. Roger W. Roth has joined Commercial Solvents Corporation, Agricultural division, as entomologist, with headquarters in New York. He will work with federal and state experiment stations and insecticide manufacturers on the new CSC products designed for use in the insecticide, fumigant, and fungicide field.

Johnson Named Western Mgr.

Jack L. Johnson has been appointed western region manager of the Kay Daumit division of the Colgate-Palmolive-Peet Company, according to H. P.

JACK L. JOHNSON

McClure, sales manager. He returns to the Colgate organization where he previously had established an outstanding record over a 20-year period. In his new position he will manage the western region operation, which covers the entire south, mid-west and Pacific Coast areas. He will also personally handle the Walgreen Drug Company account through its headquarters in Chicago.

Establish Bobst Pharmacal Co.

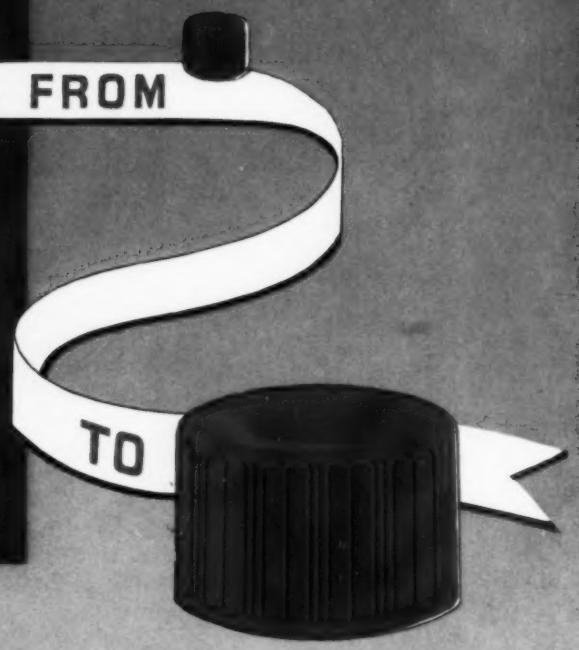
The Bobst Pharmacal Co., Inc. has been formed to specialize in the production and distribution of ethical drugs, and developed to meet health problems of the aged and aging, according to E. Walton Bobst, president. This firm, said to be the first pharmaceutical concern of its kind, has opened offices and laboratories at 305 E. 47th St., New York. West Coast offices have simultaneously been opened at 305 N. Bedford, Beverly Hills, Calif., under the direction of John A. Roosevelt, executive vice-president in charge of sales. Mr. Roosevelt is also associated with the Lee Pharmacal Company. Other officers of the company will be named shortly.

It is planned to launch six new products during the middle of this month, including Acetycol, for pain relief and increased motion-range in the arthritides; Theo-line for myocrardial stimulation, vaso-dilation and diureses; Theocholin for hypertension; Ther-a-gel for the management of digestive disorders; Cellusena, a laxative for the aging patient; and Vimone, a balanced hormonal-vitamin metabolic stimulant. These will be prescription items sold generally through drug stores. The first territories to be opned by the new firm are metropolitan New York, Los Angeles and San Francisco.

Dilatush Promoted by Armstrong

Carleton C. Dilatush, a member of the Armstrong Cork Company glass and closure division sales staff since 1940, has been named assistant manager of the company's New York office, according to R. H. Hetzel, general sales manager. He will be associated with R. J. Fitzgerald, New York manager.

STOCK Plastic Caps



AND EVERYTHING IN BETWEEN

-in any COLOR you want

No matter what size bottle closure you require, Standard's famous "Classic" design can fill the bill.

It is available in 11 sizes from 8 mm. to 38 mm.; in short, medium and tall skirt; regular finish, or with well for applicator or hole for dropper.

And we can match any color you want. Write for samples and prices on the size and quantity in which you are interested.

Standard's stock "CLOVER LEAF" design is available in the most popular cosmetic sizes and in any color . . . We are also equipped to make Private Mold Closures to your order.

STANDARD CAP
AND MOLDING COMPANY, INC.
PLASTIC CLOSURES

307 S. EATON STREET • BALTIMORE 24, MD.

OFFICES IN ALL PRINCIPAL CITIES • LATIN-AMERICAN REPRESENTATIVE: ROBERTO ORTIZ, HAVANA

Bonyun with Dorrance-Waddell

William Bonyun has joined the staff of Dorrance-Waddell, Inc., as director of marketing, according to Eugene Waddell, executive vice-president. He had been associated with Daggett & Ramsdell for 15 years and president

WILLIAM BONYUN

of that company from 1946 to 1948. He has also been associated with Stanco Distributors and the Celma Company. In addition to his new duties Mr. Bonyun will continue to serve a number of cosmetic and drug concerns for which he has been acting as sales consultant.

Squibb Employee Military Plan

Every employee of E. R. Squibb & Sons who enters the Armed Forces will receive benefits including one month's extra pay and an additional month's pay for a dependent to be named by the employee. These payments are available to those who have been with the company for a year or more.

Premiums on National Service Life Insurance will be paid for one year by Squibb for those who have participated in the company's Group Life Insurance program, while hospitalization benefits under the Blue Cross plans, and surgical benefits under the company's Group Accident and Sickness Insurance plans, will be continued for dependents as long as the employees are in the service. All provisions are retroactive to June 24 of this year.

Dr. Sokol Appointed by Heyden

Dr. H. Sokol has been appointed manager of the antibiotics research program of Heyden Chemical Corporation. He recently returned from France where he was chief technical advisor to the Societe Industrielle pour la Fabrication des Antibiotiques during the start-up of its streptomycin plant built in cooperation with Heyden.

Thomas Appointed by Owens-Ill.

Claude W. Thomas, Jr. has been appointed eastern regional merchandising manager of the glass container division of Owens-Illinois Glass Company, according to E. A. Hildreth, manager of the market development

CLAUDE W. THOMAS

department. He has been assigned the responsibility of interpreting market development policies for the company in the eastern market and will make his headquarters in the New York Office.

MCA Office in N. Y.

The Manufacturing Chemists' Association has opened an office at 330 West 42nd St., New York, under the direction of Robert L. Taylor, executive vice-president. This is in addition to the association's present offices in the Woodward building, Washington, D. C. Activities of the new office at first will be devoted to public relations matters and the servicing of member needs and association affairs in the New York area. The telephone number is WIsconsin 7-1602.

FWDA Elections

The Federal Wholesale Druggists Association reelected all officers for another year at the thirty-fifth annual meeting held from October 22 to 25 at the Greenbrier, White Sulphur Springs, W. Va. These officers are: President Reg Cary, Drug Trading Company, Ltd., Toronto, Canada; vice-president, Russell T. Blackwood Jr., Philadelphia Wholesale Drug Company, Philadelphia; treasurer, George A. Raab, Providence Wholesale Drug Company, Providence, R. I.; and executive secretary, Ray C. Schlotterer, New York.

New wholesale members elected at the meeting are: American Wholesale Drug Company, Detroit; Fred W. Curtis & Co., Troy, N. Y.; Drugs Mutual, Inc., Miami, Fla.; Drug Service, Inc., Fresno, Calif.; Emison Drug Company, Memphis, Tenn.; Knoxville Wholesale Drug Co., Knoxville, Tenn.; Sanco Drug Company, Chicago; Standard Drug Company, Kingston, N. Y.; and Tash Drug Sundries Co., Chicago.

New manufacturing members elected are: Anahist Co., Yonkers, N. Y.; Armour Laboratories, Chicago; E-Z Products, New York; Eagle Druggists Supply Co., New York; Hallmark Watch Corp., Chicago; Richard Hudnut, Toronto, Canada; Johnson & Johnson, Montreal, Canada; John G. Kyles, New York; Le Blanc Corp., Lafayette, La.; Life Magazine, New York; N. Y. Eye Protection Co., New York; Ortho Pharmaceutical Corp., Toronto, Canada; and Serutan Company, Newark, N. J.

Lo Bue Company Changes Address

The Philip J. Lo Bue Company has moved to larger quarters at 277 Park Ave., New York.

Among those attending dinner given by Parke, Davis & Co. in honor of medical scientists from 38 countries during meeting of World Medical Association last month were, left to right, Dr. Eugene H. Payne, member, department of clinical investigation, and Dr. E. A. Sharp, director, clinical investigation department, Parke, Davis; Dr. Waldo von Greyerz, Stockholm, Sweden; Dr. Morris Fishbein, editor, W.M.A. bulletin; Dr. Otto Rasmussen, Jutland, Denmark, and Dr. Hugh Clegg, editor, British Medical Journal, London.

2 big answers to 2 current needs

LAVANDULOL

An aromatic compound of the Lavender type, exceeding the oil itself in odor strength, stability and general effectiveness. Equally well suited to be used alone or as a fortifying agent for lavender oil in the proportion of 1 part oil to 3 parts Lavandulol.

GERANODOR

This excellent geranium has been synthesized on the basis of extensive tests carried out with the principal components of geranium oil. Used in a 3 to 1 combination with the natural oil it strengthens and fortifies the outstanding characteristics of the latter. It can, of course, also be used alone. It should be judged in the finished product.

Samples will gladly be furnished to users of geranium and lavender oils upon request.

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601 west 26th street, new york 1, n. y.

Robins Opens New Offices

The A. H. Robins Company formally opened its new offices at 1711 Ellen Road in September with a meeting of the firm's division sales managers. Several promotions were announced during the conference, including that of E. W. Zeller, manager of the southern division, who was elevated to the post of assistant sales manager for the company. The new positions of J. E. Norton and Clifton D. Wheeler, Jr. were officially confirmed. Mr. Norton has been transferred to Richmond as administrative assistant in the sales office and also as manager for the Virginia division. Mr. Wheeler, active in the Houston area for more than eight years, is now the southwestern division's manager.

Additional divisional heads who attended the conference were E. W. Moore, New York; C. B. Howell, West Coast; D. F. Kiddney, New England; J. H. Kerby, Chicago; F. J. Kozak, Kansas City; L. M. Wright, Pennsylvania; and W. J. Hasey, Canada.

Division managers of the A. H. Robins Company holding their annual meeting in September on the formal opening of the firm's new headquarters. Left to right, seated: E. W. Moore, New York division; W. J. Hasey, Canadian division; C. B. Howell, West Coast; D. F. Kidney, New England; J. H. Kirby, Chicago; E. F. Heffner, Jr., general sales manager; and E. C. Robins, president. Standing: G. M. Freeman, advertising manager; Dr. E. L. Jackson, medical director; L. M. Wright, Pennsylvania division; E. W. Zeller, assistant sales manager; F. J. Kosak, Kansas City division; J. E. Norton, Virginia division; and C. D. Wheeler, Jr., southwestern division.

Di Cyan Named Ass'n President

Dr. Erwin Di Cyan, director of Di Cyan & Brown, Consulting Chemists, was elected president of the Association of Consulting Chemists and Chemical Engineers at their annual meeting on October 24.

DR. ERWIN DI CYAN

Chicago Cosmetic Chemists Meet

The Chicago Chapter of the Society of Cosmetic Chemist held their final meeting of the year on Tuesday, November 14 at Henrici's Restaurant. Gene Rose of George Barr & Company spoke on "Stability Testing of Aerosol Products," and Gus Kass, of Helene Curtis Industries, discussed "Stability Testing of Hair Preparation such as Cold Permanent Waves, Hair Dyes, and Shampoos."

Eusey Named V.P. of Cal Chem.

Merritt V. Eusey, specialist in factory management and production methods, has been appointed vice-president of Cal. Chem. Company, a subsidiary of Florasynth Laboratories, according to Bill Lakritz, Florasynth president.

Harrower Promotes Schneider

Benjamin Schneider has been promoted by the Harrower Laboratory, Inc., to regional sales manager of the eastern division, according to R. D. Hetterick, vice-president and director of sales.

BENJAMIN SCHNEIDER

Warner-Hudnut Building Rededicated

Elmer H. Bobst, president of Warner-Hudnut Co. Inc., received a placque from the Avenue of the Americas Association on behalf of his firm when the company building was rededicated October 11. Attending the ceremony were high city officials, directors and members of Warner-Hudnut Co. Inc. and the Avenue of the Americas Association, as well as other interested persons.

Wax Ass'n Elects Officers

The American Wax Importers and Refiners Association, Inc. held its third annual meeting during the third week of September and elected the following officers and directors for the coming year. As president, George S. Hamilton, Innis, Speiden & Co.; vice-president, Charles S. Bullock, Strahl & Pitsch, Inc.; directors, Andrew J. Bohart, Stein, Hall & Co., J. L. de Lyra, Wessel, Duval & Co., R. E. Sievert, the Frank B. Ross Co., Mr. Hamilton, and Mr. Bullock; secretary, John J. Garvey, Mamaroneck Chemical Corp.; treasurer, Edward Schumacker, F. W. Steadman Co.

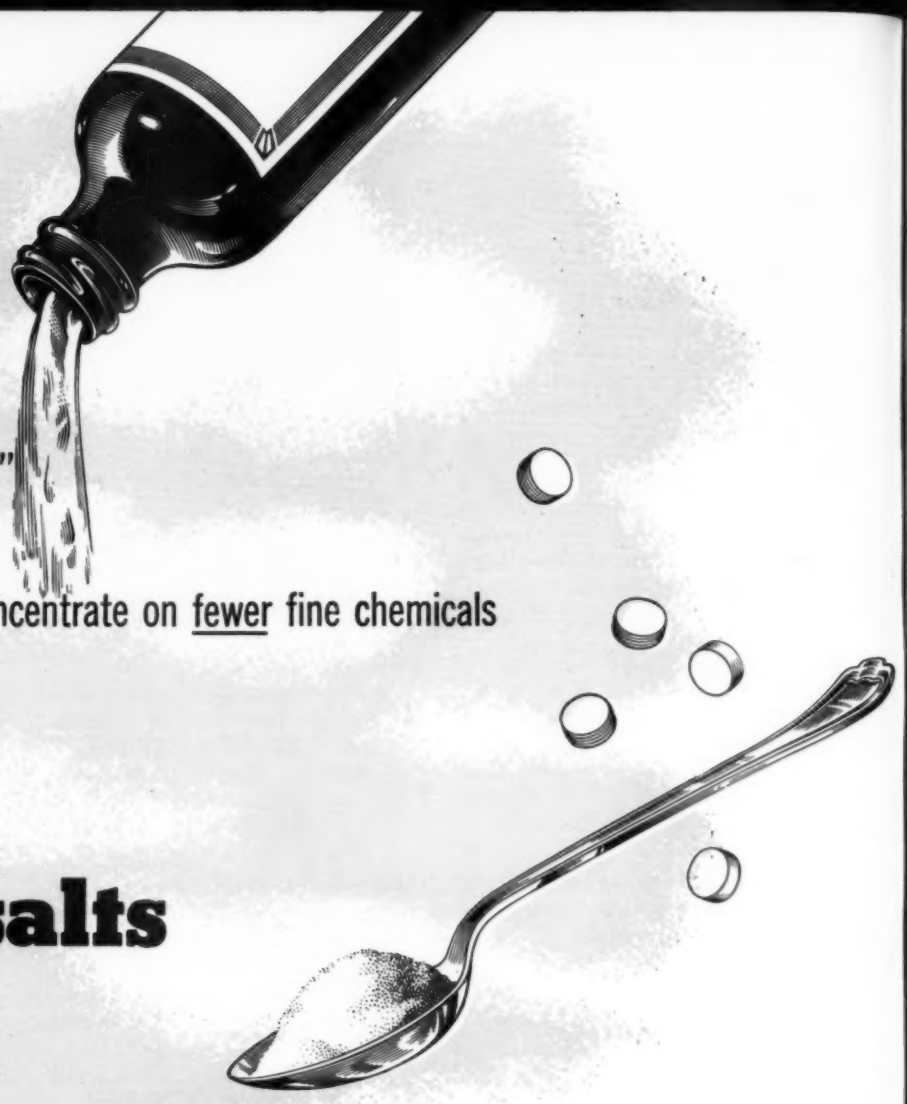
Mr. Bohart, the retiring president, reported that the Association's research project on crude carnauba wax had been completed during the past year at New York University. The findings, entitled "A Critical Study of Certain Properties of Carnauba Wax," in Booklet form, are available from the association.

Vick Chem. Promotes Watson

William C. Watson has been made assistant comptroller by the board of directors of Vick Chemical Company and will act as chief-of-staff to Comptroller Arthur L. Boschen, assuming operating responsibility in his absence. He will also serve as assistant for the comptroller's division in the company's training program for executives.

Ellis Named Vice President

S. L. Ellis has been appointed vice-president in charge of sales for Midwest Chemical Development Corp. of Cleveland, according to Dr. Albert Fisher, president.



Your needs are "best filled"

when we concentrate on fewer fine chemicals

One of our specialties:

bismuth salts

How can we "best fill your fine chemical needs" and help you maintain the precise standards you as a pharmaceutical manufacturer demand?

By producing many fine chemicals—or by concentrating on a few, making sure that each of them fits the job you have for them?

We have always felt that you could be served better, and in more ways, if we followed the latter course.

Let us see how you *gain* by using one of our specialties: Bismuth Salts.

Bismuth Subcarbonate, for example. Is your antacid preparation a liquid, a powder, a tablet? You can choose from Baker a Bismuth Subcarbonate that will "best fill your specific needs." We make four different densities.

Baker's Bismuth Subcarbonates, and Baker's Bismuth Nitrate, Subgallate, Subnitrate, Oxychloride, and Subsalicylate, are made from the purest grades of bismuth metal. A reagent grade of acid is used for the initial reaction. Color of these chemicals is exceptionally stable under exposure to actinic light.

Samples and prices will be forwarded gladly upon request. Write to *Fine Chemical Division*, J. T. Baker Chemical Co., Phillipsburg, New Jersey.

Baker CHEMICAL

Baker Chemicals

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Abbott Wins Direct-Mail Award

Abbott Laboratories won the best-of-all-industry grand award for direct mail campaigns in the 22nd annual competition sponsored by the Direct Mail Advertising Association. Abbott also won first place in the domestic and export pharmaceutical divisions.

The awards were presented at the 33rd annual conference of the association at the Roosevelt Hotel, New York, on October 4, with R. Blayne McCurry, assistant manager of advertising and public relations, accepting the honors for Abbott. Dr. Robert A. Love, director of the evening and extension division, City College of New York, served as chairman of the contest judges.

R. Blayne McCurry, assistant manager of advertising and public relations for Abbott Laboratories, accepts Best-of-All-Industry grand award which was won by Abbott in 22nd annual competition for direct mail campaigns sponsored by Direct Mail Advertising Association. Others pictured are, left to right, Johnny of Philip Morris, who called out winners; Dr. Robert A. Love, chairman of contest judges; and Harry A. Porter, DMAA president.

Named Gen. Sales Mgr. by Stange

C. A. Wood has been appointed general sales manager of Wm. J. Stange Co., succeeding the late Edward J. Marum, according to Wm. B. Durling, president. Prior to his new appointment Mr. Wood was manager of the Stange Manufacturing branch in Oakland, Cal., which serves food processors in the eleven western states.

Pfizer Antibiotics Sales Mgrs.

Carl E. Lotz has been named head of the Metropolitan New York antibiotics sales office of Chas. Pfizer & Co., Inc., while George Guess will head the Southeast office in Atlanta, and Herbert N. Nack, the Southwest district office in St. Louis.

Heads Pfizer Western Antibiotic Div.

Charles A. Kapp has been appointed western district manager of its antibiotic divison by Chas. Pfizer & Co., Inc. and will make his headquarters in San Francisco. He will supervise Pfizer professional service representatives in Washington, Oregon, Utah, Arizona and California.

Dr. Guenther Visits Guatemala

Dr. Ernest Guenther, vice-president and technical director of Fritzsche Brothers, Inc. attended the opening celebration in Guatemala of the new office and laboratory buildings last month of Oficina Controladora de Aceites Esenciales as guest of honor. The invitation was extended by Mr. F. J. Ippisch, manager of the organization, to Dr. Guenther and to Julian Lyon and Harold Sothern, the cooperative's American representatives who accompanied him on the trip.

Dr. Guenther is expected to be gone until the middle of December, during which time he plans to investigate the most recent developments in essential oil production in neighboring Central American countries, Mexico and South America.

Lambert Elected Director

Marion L. J. Lambert has been elected director of the Lambert Company, according to Edward T. T. Williams, president. He is also a director of the company's subsidiary, Lambert Pharmacal Company.

Sheffield Reappointed to Civic Post

For the second successive year L. T. Sheffield, president of the Sheffield Tube Corp., has been appointed district vice-president of the Connecticut Chamber of Commerce for the county of New London.

Parentini Opens New Offices

Joseph Paul Parentini has opened offices at 509 Fifth Ave., New York, where he will conduct a consultant and advisory service for the cosmetic and drug manufacturer.

CARL E. LOTZ

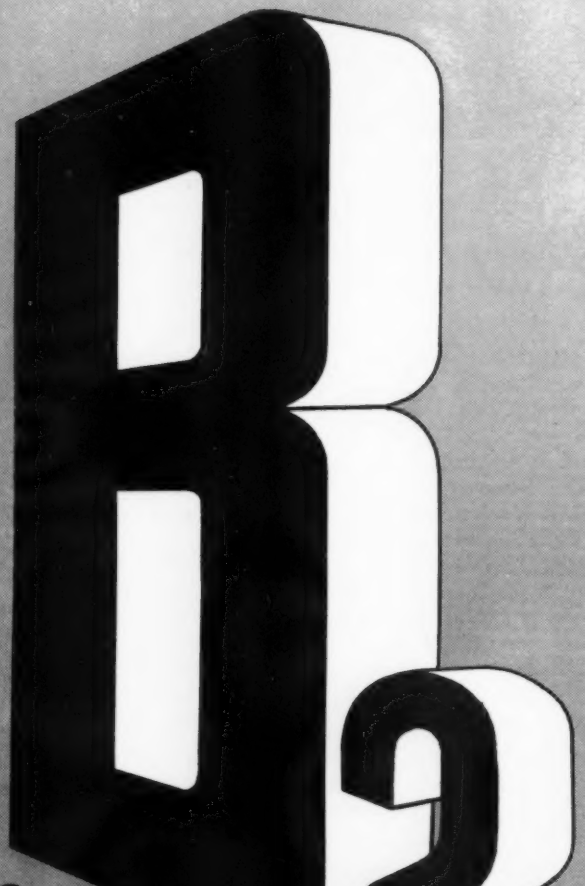
GEORGE GUESS

HERBERT N. NACK

CHARLES A. KAPP

RIBOFLAVIN, U. S. P.

Now in two types — Regular and Solutions Type.
Manufactured by the ton — to meet exacting requirements.
Place your riboflavin orders at 'Roche' Park.
Careful, courteous service extended — always.



Make Roche headquarters for:
Ascorbic Acid — Riboflavin
Thiamine — Pyridoxine
Panthenol — Biotin
dl-alpha-Tocopherol unesterified
dl-alpha-Tocopherol Acetate
Calcium Pantothenate dextro
Niacin — Niacinamide
Vitamin A Acetate synthetic
Vitamin A Palmitate synthetic

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HOFFMANN-LA ROCHE INC.

NUTLEY 2-5000
NUTLEY 10, NEW JERSEY

Pacific Coast: L. H. Butcher Company • Los Angeles, San Francisco, Seattle
In Canada: Hoffmann-La Roche, Ltd., Montreal, Que.

Daigneault Becomes Sales Director

H. J. Daigneault has been appointed director of domestic sales of National Aniline division, Allied Chemical & Dye Corporation, with headquarters at 40 Rector St., New York. He succeeds E. M. Maxwell who recently became president of National Aniline division.

H. J. DAIGNEAULT

Arenco Appointments

The Arenco Machine Company, Inc. has appointed as sales representatives King & Anderson, San Francisco; H. Lyle Greene, Chicago; R. P. Anderson Co., Dallas; Packaging Equipment Inc., St. Louis; and Tom McLay, Port Deposit, Maryland.

Form Adams-Henry Chem. Co.

John F. Henry and Halstead J. Adams have formed the Adams-Henry Chemical Company, Inc., which will act as selling agent and distributor of industrial and fine chemicals, intermediates and dyestuffs. Their offices are located at 32 Broadway.

With Sterling Drug 50 Years

Charles E. Mercready, of the R. L. Watkins Company division, received a $1000 bond and a wallet containing 50 one-dollar bills, upon the completion of his 50th year of service with Sterling Drug Inc. On entering his 51st year with the company, he attended a luncheon at the Hotel Astor as guest of honor. Also present were Dr. J. M. Hiebert, executive vice-president; H. M. Manss, vice-president; D. H. Williams, divisional vice-president of R. L. Watkins Co.; and R. R. Ekelmann, plant manager of R. L. Watkins.

Mr. Mercready who began work in 1900 at the age of 14 as an office boy for the Centaur Company division, is now engaged in the stock room of R. L. Watkins.

Scheller With Armour Labs.

James C. Scheller, Jr., former assistant to the vice-president in charge of advertising of White Laboratories, has been appointed advertising manager of the Armour Laboratories. He had formerly been sales-advertising manager of Whittier Laboratories and assistant advertising manager of Parke, Davis & Co.

Hunt Promoted by Breon

Lawrence T. Hunt has been promoted from technical service representative to district manager of George A. Breon & Company, according to C. B. Drolsbaugh, vice-president in charge of sales. He has been placed in charge of a new district covering Michigan, Ohio, and Indiana and is making his headquarters in Columbus.

Appointed by Bjorksten Labs.

Dr. Howard Lyle Gottlieb has been appointed development chemist by Bjorksten Research Laboratories, Inc. He will work on a new type of packaging material being developed by the Laboratories, useful in preventing corrosion of metal parts in transit or in warehouses.

Galitz Named Chicago Rep.

Vernon K. Galitz has been named Chicago representative of the Bush Aromatics division of the Dow Chemical Company. He will work out of the Chicago sales office, and his territory will include Indianapolis, Milwaukee, and the Twin Cities.

Nominations for Iodine Award

The American Pharmaceutical Association is now receiving nominations for the 1951 Chilean Iodine Educational Bureau Award. Any member of the association may propose a nominee by submitting eight copies of each of the publications to be considered in the competition, a biographical sketch of the nominee including date of birth and a list of his publications.

Eight copies of the nomination must be submitted to Robert P. Fischelis, APhA secretary, 2215 Constitution Ave., N. W., Washington 7, D. C., on or before January 1, 1951.

A nominee must be a resident of the United States or Canada and, to be eligible, must be engaged in the research on the chemistry or pharmacy of iodine and its compounds as applied to pharmacy or medicine during the period covered by the nomination. The award consists of $1,000, $250 for expenses and a diploma stating the reasons for selection.

Robins Promotes Zeller

E. W. Zeller, southern and southwest division manager for the A. H. Robins Co., has been promoted to assistant sales manager. At the same time he will retain managership of the southern division and, for the present, continue at the Atlanta headquarters.

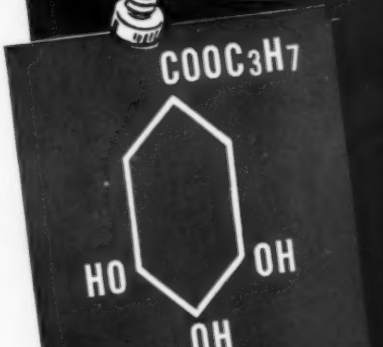
Promoted by Lever Brothers

A. B. Peterson has been appointed general sales manager of the Pepsodent division of Lever Brothers. He has been with the company since 1934.

Charles E. Mercready receiving congratulations from R. R. Ekelmann, plant manager of Watkins div., on completion of 50th year with Sterling Drug Inc. Left to right: D. H. Williams, divisional vice-president of the R. L. Watkins Co. division; Mr. Mercready; Mr. Ekelmann; and Walter A. McCormack, plant superintendent.

PROPYL GALLATE

Heyden Propyl Gallate is a purified form of n-propyl gallate (propyl 3,4,5-trihydroxybenzoate). It is a powerful antioxidant serving effectively as a stabilizer for edible oils and fats, ethers, emulsions, waxes and other materials subject to deterioration or auto-oxidation through formation of peroxides. It is active in very low concentrations and protects color, odor and taste of the finished product. It is non-toxic in the amounts commonly used.



PROPERTIES

Appearance	Ivory, fine powder
Odor	Odorless
Taste	Tasteless in 0.01% solution
Melting Point	147°—149°C.
Solubility (g. per 100 g. solvent)	
Water at 25°C.	0.35
Water at 50°C.	1.8
Ethanol at 25°C.	103
Ether at 25°C.	83
Glycerol at 25°C.	25
Propylene Glycol at 25°C.	67
Cottonseed Oil at 30°C.	1.23
Lard at 45°C.	1.14

• • •

Shipped in 200, 100, 50 and 25 lb. fiber drums. Detailed technical data sheet will be mailed promptly upon request on company letterhead.

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Winthrop-Stearns Appoints

Alva Proctor and Harold Q. Callahan have been appointed divisional managers of the professional services offices in Chicago and New Orleans, respectively, by Winthrop-Stearns Inc., according to Joseph G. Noh, vice-president and director of sales. Mr. Proctor, formerly special hospital representative, succeeds E. E. Dungan who resigned as Chicago manager, while Mr. Callahan replaces W. D. Riley, who left the company.

ALVA PROCTOR

HAROLD Q. CALLAHAN

Address Aromatics Course

Dr. Oliver L. Marton, chief chemist of Shulton, Inc., spoke on the subject of Cosmetic and Perfume Materials November 13 in the Aromatics Course at New York University which is being conducted by Samuel Klein. Mr. Klein has invited four additional guest speakers to address his class during the latter part of November and the first half of December. These include Carl Jensen, flavorist, Givaudan Flavors, Inc., who will speak on "Flavor Development and Application; Herbert Sommer, perfumer, Prince Matchabelli, Inc., whose subject will be Preface to Perfumery; Dr. Kurt Kulka, research chemist for Dodge & Olcott, Inc., who will talk on Oleoresins in Perfumery; and Julien A. Bellot, consultant perfumer, who will discuss Creative Perfumery.

Heyden to Enlarge N. J. Plant

Heyden Chemical Corporation will spend approximately $1,175,000 for additions to existing manufacturing facilities at its Garfield, N. J., plant, according to a recent announcement. The alterations will include a new power plant unit and new manufacturing units for the production of Pentaerythritol. The installations are expected to be completed during the last quarter of 1951.

Kesling Joins Innis, Speiden

J. P. Kesling, for the past five years on the technical sales staff of the Dicalite Corp., has joined Innis, Speiden & Co. as a member of its technical sales and service staff, according to D. S. Cushman, vice-president in charge of sales.

Appointed by Comm. Solvents

Walter C. Gwinner has been appointed to the technical service division in the New York office of Commercial Solvents Corporation. He had previously been in the research department of American Cyanamid Company.

Fritzsche Moves San Francisco Office

Fritzsche Brothers, Inc. have moved their San Francisco office from its former location in the Rialto Building to 395 Monadnock Building, 681 Market Street. John T. Brickner is resident manager of the branch.

Gane's Chem. Wks. Price List

Gane's Chemical Works recently published their October price list which includes the principal chemicals of aminophylline, theophylline, barbiturates, benzocaine and para aminobenzoic acid.

Name Judges for Welch Award

The Toilet Goods Association has announced the judges for the Charles S. Welch Memorial Award, as follows: Julia Coburn, director, Tobe-Coburn School for Fashion Careers; Fleur Cowles, editor, Flair Magazine; J. S. Holliday, toilet goods buyer, Joseph Horne Co., Pittsburgh; John W. McPherrin, editor, the American Druggist Magazine; and L. C. Shockley, director of sales and advertising, McCrory Stores Corporation.

Instead of the customary single award, two awards will be presented this year, one for the most outstanding package, in the opinion of the judges, retailing at $1.00 or less, and the other for the most outstanding package retailing at more than $1.00. The bronze placques will be presented to the winners at the annual convention of the Association in May, 1951.

Despres Elected Executive V.P.

Jean Despres, general sales manager of Coty, Inc., has been elected executive vice-president, according to Philip Courtney, president. He has been associated with Coty for the pasty thirty years.

Delou Establishes Nat'l Offices

Delou, Inc. has set up national offices at 90 West St., New York, for the exclusive importation into the United States of a complete line of natural gums and resins, including shellac for incorporation into various drugs and cosmetics.

Appointed By Bourjois

Pierre Godart formerly vice-president of Weco Products Co. in charge of sales promotion, has been appointed assistant to the president of Bourjois, Inc., according to Norman F. Dahl, president.

Divisional managers of Abbott Laboratories who recently met in Chicago to exchange sales ideas. Standing, left to right: Tom E. Braden, southwest division; Joseph H. Marchand, Canadian division; and Harold C. Clauson, east-central division. Seated are: Hugh C. Harris, northeast division; George Epstein, central; H. C. Wilkinson, director of sales; J. F. Richmond, eastern division; and M. D. Wilkinson, southeast division.

Why You Pay So Little Today for PETROLATUM

- *The Story of How Refining Techniques Developed by Sonneborn Research are Helping to Keep Your Costs Down!*

The cost of almost everything in your business—raw materials, wages, equipment—has skyrocketed during the past fifteen years. That is, almost everything except petrolatum. During this period, the rising cost of steel, for example, outdistanced petrolatum price increases by some 380 per cent.

In the face of greatly increasing material and labor costs, Sonneborn research accomplished this miracle by analyzing and standardizing each step in the refining of petrolatum. As a result, production time and cost are held to an absolute minimum—product quality and uniformity are greatly improved.

That is why, in spite of continually rising costs of everything that goes into making petrolatum, you pay so little today for the finest grade of petrolatum. Another example of Sonneborn research.

WHITE OIL & PETROLATUM DIVISION,
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Sonneborn
Leads through Research
WHITE OILS • PETROLATUMS • PETROLEUM SULFONATES

Stokes to Expand Factory

The F. J. Stokes Company, Philadelphia, has launched a $700,000 expansion program, adding one third in space to the present plant, according to Francis Dougherty, president. Completion is scheduled for early 1951.

This expansion program is in keeping with the company's history of pioneering in new fields, the president stated, by furnishing special equipment to major industries for the past fifty years. "The company's progress," he continued, "is based on extensive laboratory research development of precision made machines, redesigning and streamlining of equipment and processes to meet new trends, and a complete resourceful advisory service to answer manufacturers' many problems."

Francis J. Stokes, founder of the business, who is still active with the company as chairman of the board of directors, said, "We have enjoyed a good reputation for over half a century. I am very happy to be able to look back over the company's service history and have the satisfaction of knowing that Stokes is steadily progressing to meet the new demands of industry."

Some of the additions to the plant will be a relocation of the railroad siding and enlarging of roadways in order to speed deliveries and handle larger equipment; the expansion of the laboratory facilities with new equipment; and the installation of precision testing and inspection apparatus, as well as many high-speed modern machine tools.

A considerable addition to the working staff is also expected.

Research Director of Kremers-Urban

Dr. Adrian Kameraad, formerly on the faculty of Northwestern University Medical School, has been appointed director of research at Kremers-Urban Company, of Milwaukee.

Jeffs on Enloe Staff

Bernard Jeffs, for many years vice-president of Reed & Carnrick in charge of sales and advertising, joined Cortez F. Enloe Inc. this month as an account executive.

Ohlsson Resigns from Van Dyk

Ernest Ohlsson has resigned as chief chemist and production manager of Van Dyk & Co., Inc. He was associated with the company, of which he was also director, vice-president, and secretary, since 1915. At the same time he was secretary of the affiliated company, Summit Chemical Products Corporation. Mr. Ohlsson has not announced his future plans.

Appointed by Sharp & Dohme

Harold V. Darnell has been appointed commodity analyst for Sharp & Dohme, according to E. J. Carroll, director of economic research.

HAROLD V. DARNELL

William H. Doble

William H. Doble, founder and chairman of the board, Pneumatic Scale Corporation, Limited, died suddenly October 29 at his summer home in West Harwich on Cape Cod at the age of eight-eight. A pioneer in the specialized field of packaging, he was internationally known as an authority on automatic packaging methods.

Helen Allen

Helen Allen, executive vice-president, secretary and assistant to the president of Corday Parfums, Inc., died October 31 at Memorial Hospital, New York, following a brief illness. She was forty-two years of age.

Miss Allen had served in the perfume industry for more than twenty years, having started in a secretarial position with Storfer Laboratories, a firm conducted by Benson Storfer, now president of Corday. She joined Corday in 1933. An authority on packaging, Miss Allen was one of the outstanding designers in this field. During the second World War she was the only woman member in the cosmetics section of the Office of Price Administration.

Interested in promoting easy-to-carry perfume ideas for women, Miss Allen originated the purse-size containers marketed by Corday and also the idea for portable perfume cases now widely adopted by many perfume houses.

After becoming associated with Corday, she also served on the Charles S. Welch memorial award committee. Surviving Miss Allen are her father, Samuel Allen of Miami; a sister, Mrs. Edith Clarke of New York; and a brother, Kenneth Allen of Washington.

Cecil Smith

Cecil Smith, former president of Yardley of London, Inc., and a former president of the British Empire Chamber of Commerce in New York, died October 23 in Greenwich, Conn., following a brief illness. He was 66 years old.

He came to this country from London in 1921 establishing a branch of Yardley & Co., Ltd. and served the firm for forty years, having retired in January, 1949. Immediately prior to the first World War he established another branch in Australia. Mr. Smith was a former president of the Toilet Goods Association and a former director of the Perfumery Importers Association. He was a member of the Century and Pine Valley Clubs of New Jersey and the Winged Foot Country Club.

Surviving are his widow, Mrs. Christine Chabot Smith; two Sons, Philip C. and John Chabot Smith; a daughter, Mrs. Doris S. Gerould; two brothers, Horace F., of Sanderstead, England, and Leonard Smith of Southern Rhodesia; a sister, Mrs. William S. Cowling of Bournemough, England, and seven grandchildren.

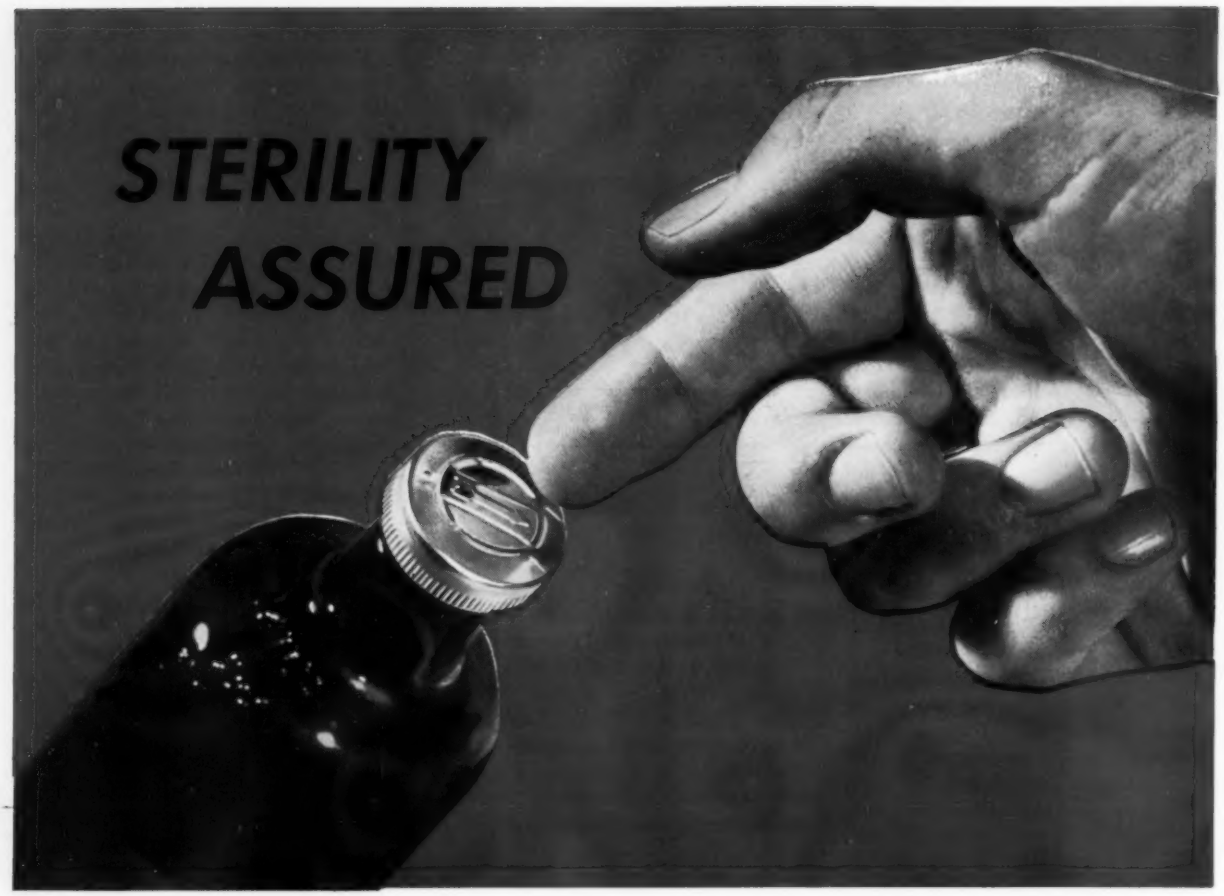
Charles Sisson Drane

Charles Sisson Drane, vice-president in charge of advertising of Plough, Inc., died September 25 in Battle Creek Sanitarium, Battle Creek, Michigan, after a long illness. He was 61 years old and had been connected with Plough for 20 years. Well known nationally in the pharmaceutical and cosmetics advertising and promotion fields, Mr. Drane had served on various committees for many years in both the Proprietary Association of America and the Toilet Goods Association of America.

Before joining Plough in 1930, Mr. Drane had held executive positions in Memphis with Ellis-Jones Drug Company and Commercial Chemical Company. He is survived by his wife and four sisters.

Martin C. Schuehle

Martin C. Schuehle, 62, New England district manager for Merck & Co., Inc., died October 16 at Newton-Wellesley Hospital in Newton, Mass. He had completed more than forty years of service with Merck, having held the post of New England district sales manager for many years. Mr. Schuehle is survived by his wife, Mrs. Virginia A. Schuehle; a brother, Christopher; and a sister, Mrs. Joseph Eschbach.



Leading pharmaceutical manufacturers rely on the three-way protection provided by ALCOA STERICAPS. The outer, tear-off cap protects injectables against tampering. After opening, the cover cap guards against superficial contamination and Secure sealing is assured with this inner ferrule. Closures are available in a variety of types and sizes. Automatic or manually-operated machines provide economical application. For complete information write for your copy of our catalog . . . it's free. ALUMINUM COMPANY OF AMERICA, 1702L Gulf Building, Pittsburgh 19, Pennsylvania.

ALCOA
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CLOSURES
FORMERLY SOLD AS ALSECO SEALS

MANAGEMENT FORUM

By Francis Chilson
Industrial Consultant

The Red Stain

Slowly the red stain floods across the world poisoning the minds of men, but far more important, *poisoning the minds of children.* We may feel we can contain the flood by building dykes of guns and bombs against it. This is the foreign policy of our government. But never in the history of man have guns stifled the spread of ideas—good or bad. The Reds know this. They know they can't sell communism to the members of the Union League Club or the American Association of Manufacturers. They don't waste time trying. They are reaching out to the children; directly and through the teachers and parents. In this they are following a very sound principle. Age old and true. In many ways has this principle been stated. "As the twig is bent, so will grow the tree." Christ said, "Suffer the children to come unto me." Later the Jesuits said, "Let us teach the child until he is seven; after that you may do as you will with him."

In Russia a full generation has come to maturity since the revolution of 1917. The Russians who remember what life was like in Russia before the revolution are dead or rapidly dying and the first generation of revolutionary Russians are begetting children, who from earliest sentient childhood are indoctrinated with the communist idea.

It is so also in the "iron curtain" countries. Children who were just entering school when the Russians took over are now graduating from grammar schools, having been thoughtfully drilled in the Russian concept of life. Children starting school now will get an even more rigorous drilling, against which, thoroughly freightened parents will dare to offer no contrary opinions. All over the world the twigs are being bent and even if, by force of arms, we chase the communists back to their own country, we shall still have communism to contend with. Not only abroad but here.

Through the dyke of guns the red stain will continue to seep, coloring the minds of growing children. And that coloring will come not alone from red teachers and communist agents; it will come as well from parents—especially the poorest ones. People who have neither a comfortable store of the world's goods nor the ambition and education to get their share, always are envious of those who prosper. These are the dangerous parents. But their influence can be offset by correct education.

Education is not something to be left to teachers. You should have a hand in it, not only with respect to your own children, but through your employees and co-workers, *their* children as well. For a time a number of companies carried on a program among their employees to emphasize the benefits of the American way of living. But such efforts appear to have exhausted themselves at a time when they are needed most. Education is an endless process and if you are to do your share in preserving your own business you must participate in this process. How? There are many ways.

Those of you who read extensively and travel about the country with open eyes and ears must realize that the motives of management and capital are distrusted by workers everywhere. Also hourly men resent the prerogatives and earnings of the salaried men and both in turn resent the affluence of the bankers and stockholders, who apparently recieve so much for such a little apparent contribution to any business. That such attitudes do prevail is caused by the failure of management and capital alike to participate persistently and honestly in education.

First of all, secrecy about company activities should be abolished even when such companies are privately owned. When every employee feels free to ask any question whatsoever about the business, he derives that feeling of "belonging" about which everybody talks as a necessary ingredient of labor relations but few actually do anything about.

Next, means should be established through which workers can participate in the ownership and profits, not only of their own company, but in many other companies as well. It is fruitless to talk about the

desirability of widespread stock ownership on the part of workers when the unit prices of good stocks are so high. Every company should operate an investment trust for the benefit of its employees and the shares in the trust should be priced low enough so that even the lowest rated worker can afford to buy shares. And the investment fund should contain some of the company's shares also.

There are any number of sound investment trusts operating now: Boston Fund, Massachussetts Investors Trust, Lehman Fund, Chemical Fund, etc. These trusts buy securities all across the board and, with these as collateral, issue their own securities at a low price. Ownership of these trust certificates gives the owner a feeling of participating in the ownership of a great many companies.

Do your employees know that the purchase of a Boston Fund certificate (currently quoted at about $22) enables them to participate in the growth and earnings of about a hundred companies? Isn't it logical to suppose that ownership of a few such securities and the opportunities they provide to read simple financial reports, would give your people a better concept of what capitalism is and how it works?

Do your employees know how a savings bank works? Do they know what happens with their money when they put it into a bank?

I'll wager they don't. I have talked to college graduates who hadn't the vaguest idea what happenes to money when it deposited in a bank. One such—a Yale man incidentally—said in answer to my question, he supposed the money was put into vaults and kept there until it was wanted?

If our workers do not know what the capitalistic system really is—how it is bread and butter to them—and if they haven't the most elementary notion of how it works, how can the system be defended against the lying, insidious attacks of the communists, who *know* how their system works (or they think it works).

You can't escape responsibility by telling your people about all the books that have been written about the benefits of the capitalist system and how it works. People don't read any more—if indeed they ever did. While your employees are at work you have a captive audience. You can teach them by brief plant broadcasts, pamphlets, pay envelope inserts, slogans on pay checks, posters, contests and many other ways exactly how the capitalistic system works. Use your own business as an example; it is after all a microcosm of the capitalist system—and what you have to say will be more readily understood.

If this suggestion bores or annoys you and you feel inclined to "let George do it;" just remember that if a majority of employers continue to feel like letting George do it, George will do it. Only his name won't be George; it will be Joe. And you know his last name.

Research Incentives

The possibility of stimulating research productivity through incentive payments seems to have struck a responsive chord, judging by the mail I've had on the subject. One research man, whose discovery of a patentable product has in the course of years made millions for his company, told me about the incentive compensation he received. When he assigned his patents to the company, he received a dollar "and other valuable consideration." The other valuable consideration came a few years later when he got fired for getting into the hair of the high brass.

Some people seem to feel that the compensation of research men is a touchy subject. It is best apparently to let sleeping dogs lie. But we don't worry about incentives for salesmen; we pay incentives for increased production. If research ideas come to us from outside sources we do not hesitate to pay royalities. Why shouldn't we pay research men on an incentive basis?

One salesmanager said to me that no research product was worth a damn until through sales effort a market had been established for it. Generally this is true— and it is a point which research men very often forget—but there are cases where outstanding research products, through their own intrinsic merit or a lucky publicity break, have established their own markets. Consider the history of the products that were mentioned in Readers Digest articles. It is undeniably a fact that in introducing a new product a firm may have to spend—that is to say invest—several times what the research project cost. This however does not detract one iota from the value of research incentives.

If other phases of the business can be stimulated by incentives, why can't research be stimulated the same way? One of my clients thinks it can and has proved the point by experience.

To avoid bickering as to who thought of the idea first this plan is placed on a departmental basis.

This plan is based upon the fact that new product has a maximum life of five years, of which one is required to launch it. Consequently research expenses are amortized on a sliding scale over this period as a separate deduction from gross profit to arrive at the profit base on the item for incentive payment purposes.

Because of the fact that the cost of launching a new item may, the first year, obviate any possibility of profit, this particular company bases the first year's research bonus as follows: ten percent of the profit after deducting a proportionate share of research expenses or two percent of the net sales whichever is higher. This is done to give the research men a bonus the first year regardless of profit on the item. Should an actual loss be incurred the first year it is carried forward to the second and deducted in arriving at the incentive base.

The bonus distribution is limited to scientific men and does not include laboratory workers. Distribution is effected on a factor basis by multiplying total number of years worked by annual salaries. The total for the department represents 100 percent. Each man's share is calculated by multiplying his length of service by his annual salary and the percentage this bears to the grand total determines his share of the bonus.

Doubtless there are inequities in such a plan but it is better than nothing. In some laboratories the director is a politician who knows how to get credit for everything without actually contributing a worthwhile idea. In still other laboratories there is a terrific disproportion between the salary paid the director and the average salaries paid the work horses. But I have seen enough of the plan in action to know that with good will on everybody's part an equitable plan could be worked out so that the fertile-minded idea man would get a larger proportion of the bonus than the rank and file. In the meantime under such a plan he'd get something over and above his base pay.

The Labor Situation

Time was when people desiring to locate new plants could think in terms of "cheap labor" areas. Having just completed a study of a number of areas in the South (which used to be considered a cheap labor area) I have found that there are no such areas any more. The seventy-five cent minimum has put an end to such areas. In some parts of the South I found that labor rates are as high or higher than in the North.

Another thing my survey revealed and that is labor is getting scarcer. Many influences are accountable for this. Married women are not working in the same numbers as formerly. Older people in increasing numbers are retiring on pensions. The armed forces are absorbing a lot of workers. Government bureaus are flourishing like poison ivy.

Now is the time for a careful study of your entire labor policy. Not only your rates should be studied but all the reasons why anyone should remain in your employ should be weighed. You might for example offer special annual bonuses to all people on your payroll now who are still on it at the end of 1951. You might consider a sliding scale bonus, to compensate people at an increasing rate for sticking with you. Don't forget it costs money to train people and if you let anybody get away from you, the chances are that not only will you have to pay the training cost again, but the replacement will not be as good a man as the one you lost. Today the good men and women are employed. Many of the floaters are riff raff and incompetents.

Radio Active Tracers

The new tool of radioactive tracer techniques was said to be a revolutionary advancement in industrial research and would provide better foods, cosmetics, clothes, automobiles and other products at less cost. The speaker was Dr. Johan Bjorksten, of the Bjorksten Research Laboratories, in his address before the dinner meeting of the Chemical Arts Forum at the Merchandise Mart in September.

"Much time and power are wasted in mixing operations in industry today," said Dr. Bjorksten, "because it is difficult to determine when a mixture is well mixed. This applies to food manufacture, metallurgy, cosmetics, textiles and nearly every form of industrial operation. By use of one milligram of radioactive potassium salt, for example, incorporated in a production batch of 10,000 gallons, it is possible to tell almost instantly how effectively and how thoroughly the batch is being mixed and when it is completed. This can save hours of production time, improve quality and create considerable cost savings.

"Besides radioactive potassium, many other radioactive elements are available at nominal cost. For development work in electroplating, or as a tracer for steel, there is available radioactive chromium. For the pigment, paint, lacquer or the printing ink industries, there are in addition, radioactive titanium oxide, cadminums and zinc. With these radioactive metals, pigments can be made and the rate of wear of test samples of paint can be determined virtually in a number of days, instead of years as is the case today.

"Radioactive phosphorus, iodine, chlorine and sulphur are other tracers which lend themselves to production improvement in the fertilizer, solvent, detergent and mining industries.

"Even calculating wear and tear of machinery parts is simplified by use of radioactive techniques. For example, a manufacturer of calculating machines, typewriters, drill-presses or any intricate machine, can readily know how the wear dust from one part spreads in the machine, and how it affects the wear of other parts. To do this, he would have the machine part in question irradiated to a suitable level, so as to turn it radioactive, and then insert it in a machine in use. Any dust coming from wear of this particular part can then be readily traced where it deposits at other points of the machine. These techniques are also of value in studying piston rings and other operating parts in automobiles.

"Actual applications of these techniques are under way today in the oil industry, in pharmaceuticals and to a limited extent, in machinery production. The field is still in its infancy. But the tools have been developed; they are here to be used by industry."

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Freeze Drying

The F. J. Stokes Machine Company announces the release of a new 16-page, 3-color data book and catalog entitled "Stokes Freeze-Drying Equipment for Research and Industry." (Catalog No. 706)

The new catalog outlines the basic principles of freeze-drying and describes and illustrates both the freeze-drying equipment available for research and production, and the necessary auxiliary equipment.

Copies of Catalog 706 will be sent on request. Write the F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia 20, Pa.

LABELING WITHOUT GLUE

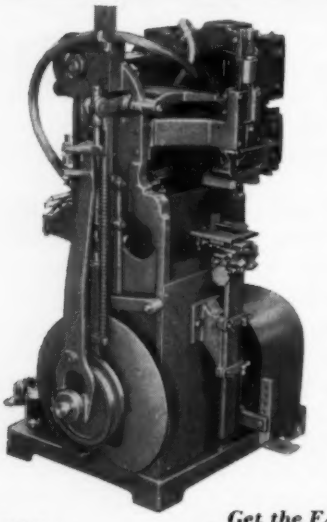
NO GLUE TO FUSS WITH

NO LOOSE EDGES ON LABELS

NO DAILY "CLEAN-UP"

That's trouble-free Labeling

*Available only on the Label-DRI**



Here's quick relief from all the variables due to the nature of adhesives; daily preparation and maintenance; daily clean-up; intermittent check-up on viscosity. The *Label-DRI*, using thermoplastic-coated labels (which your own printer supplies), utilizes heat to activate labels for all-over, permanent adhesion. *You never saw a neater, sweeter labeling set-up*—eliminating all the doubts and messiness of glue handling.

Get the FACTS regarding the whole, simple details of "labeling without glue". Write for folder!

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Cincinnati, 1701 Carew Tower
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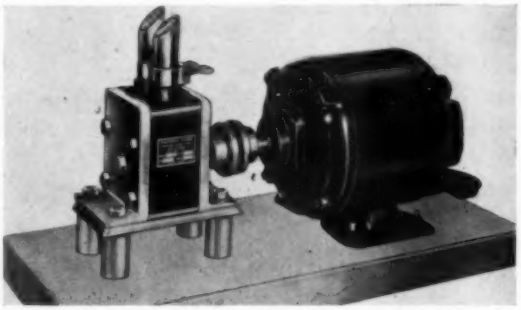
Flex-i-Liner Pump

The successful application of the Vanton "flex-i-liner" Pump in removing and salvaging without contamination the foam overflow created in the filling process of liquid shampoos is saving the Rilling Company, 235 Walliston Street, Bridgeport 7, Conn., manufacturers of Rilling Koolerwave Hair Dressings, Shampoos, and related cosmetic products, 2 per cent of weekly production volume, or a cool 12,480 gallons of foam overflow per year, worth approximately $7500. The Vanton Pump more than paid for itself in five days.

The use of the non-corrosive Vanton "flex-i-liner" Pump with plastic block and liner, in which transferred liquid never touches any of the metal parts, running dry part of the time and operated in parallel with the vacuum pump and in conjunction with an air-foam separator, resulted in a highly efficient filling unit of low initial cost, power consumption, and maintenance.

The unique design of the Vanton "flex-i-liner" Pump makes it particularly adaptable for use in the Cosmetics Industry, or in any other industry where handling corrosive liquids, such as acids, alkalies, and industrial alcohols, as well as many corrosive gasses, is a problem.

The construction of the pump is such that the fluid flows on the outside of the "flex-i-liner" and on the inside of the body block. The "flex-i-liner" material can be specified in either a pure gum rubber or a synthetic rubber, depending upon the particular application, while the body block is manufactured of special corrosion and abrasion resistant bakelite. An eccentric rotor mounted on a ball bearing rides inside and activates the "flex-i-liner". The "squeegee" action thus created is the basis of the pump operation.



In addition to its non-corrosive feature, the Vanton Pump offers many other desirable characteristics. The unit is of the positive displacement type and self-priming, doing away with the usual bothersome priming devices. The possibility of external leakage and contamination by oil or grease is avoided by eliminating glands or stuffing boxes from the design of the unit. The absence of check valves of any sort adds to the pump's simplicity. Maintenance is a negligible factor, a point of special importance in locations where spare parts must be held to a minimum. Infrequent replacement of the "flex-i-liner" is the the only pump service necessary. This can be done without having to remove any pipe lines or attached equipment. The unit is small and compact: 3¾" x 4½" x 2½". The Vanton "flex-i-liner" Pump is manufactured and sold by the Vanton Pump Corp., Empire State Bldg., New York 1, N. Y.

Stokes Coating Pans

The Stokes 1-D Coating Pan is now available for the coating of tablets, pills, candy products, etc. The new stand is totally enclosed so that bearings, drive mechanism, and all moving parts are fully protected from dust and dirt. Thus cleaning is simplified and can be done in a fraction of the time usually required. Adequate ventilation prevents overheating of motor. The pan shaft is strongly supported and designed to give trouble-free operation under the full loads of pans of 42 inches or more in diameter.

Stokes Coating Pan Stands are normally designed to operate at optimums of 25° to the horizontal and 26 r.p.m. However, different angles and speeds can be provided at the user's option.

The electrical contactor and built-in-foot-operated switch conveniently located for the operator are also new features which add to ease of control. Complete information may be obtained by writing F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia 20, Pennsylvania.

Hydraulic Mixers

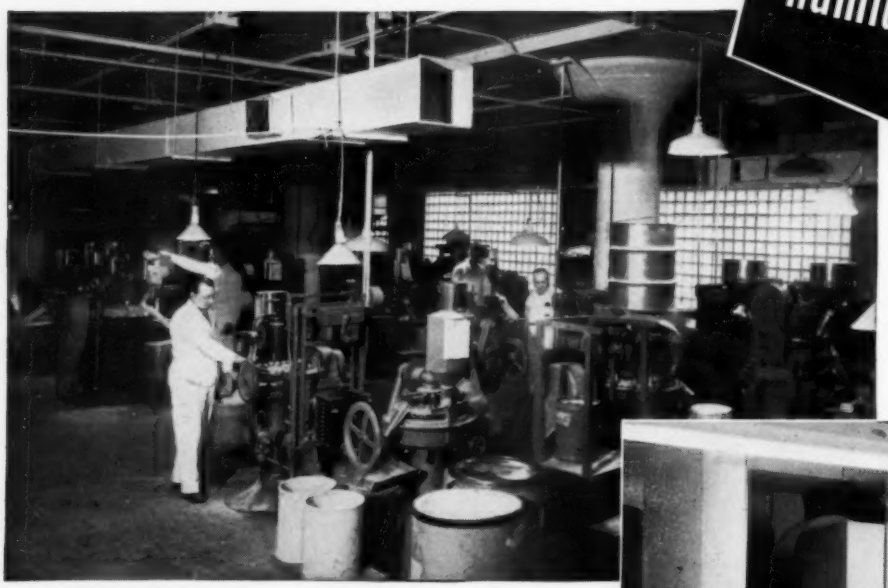
The Cowles Company, Inc., Cayuga, New York, has just announced two new hydraulic lift dissolvers—Model 10D-1H and Model 20D-2H.

Both models are standard dissolvers intended for plant operations where it is faster and more convenient to process materials in tanks brought to the machines. The impeller raises and lowers hydralically by water pressure so that it clears the top of containers and can be positioned correctly for the maximum dissolving or mixing effect.

The bridge on Model 20D-2H, which carries the dissolver unit, swings in an arc so that several con-

Rexall 300 MILLION TABLETS A MONTH...

with the help of Lectrodryer humidity control



Below: This type CHR Lectrodryer maintains 30% relative humidity in this tableting room the year 'round.

Night and day, seven days a week! That's the schedule on which this Lectrodryer works, holding the humidity constant—one of the many precautions Rexall Drug Company takes to insure constant quality of the tablets made here.

Elsewhere in this plant, two Type C-150 Lectrodryers—long since superseded by the Lectrodryer shown above—are at work. Installed first in Boston in 1938, they were later moved here to St. Louis. They go about their DRYing job faithfully and efficiently, unaware of the fact that they are grandparents.

You can depend on Lectrodryers to DRY air, gases and organic liquids—large quantities or small, atmospheric pressure or up to 5,000 psi., to dewpoints below -110° F. Quite likely, there's a standard Lectrodryer ready to step out of our catalog into your plant.

Let Lectrodryer engineers help you determine what type and size you need. Tell us your DRYing problem. Pittsburgh Lectrodryer Corporation, 309 32nd St., Pittsburgh 30, Pa.

In England: Birlec, Limited, Tyburn Road, Erdington, Birmingham.
In Australia: Birlec, Limited, 51 Parramatta Road, Glebe, Sydney.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

LECTRODRYER

REGISTERED TRADEMARK U.S. PAT. OFF.

tainers can be set around the dissolver permitting continuous machine operation while processed tanks are removed and unprocessed tanks substituted.

Drum Sling

F. J. Stokes Machine Co. has devloped a drum sling with which a single workman with a chain hoist can easily and quickly replenish the hoppers of molding and tabletting presses from drums holding up to 300 pounds of material. Drums of 16" to 24½" diameter and 24" to 36" in height can be accommodated.

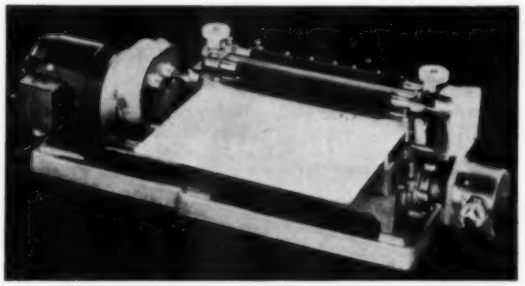
Operation is simple in the extreme. The sling is placed on the floor and the drum placed on the lower support member at floor level. The upper support member is then firmly secured by two handwheel screws. The entire unit is raised by chain-hoist to a position over the hopper. The complete assembly is then rotated on pivot bolts located at the center of gravity. A canvas sleeve with shut-off valve unfolds from the inverted top support and receives the material which flows from the inverted drum.

The Stokes Drum Sling is especially valuable where a great deal of material must be handled. Labor saving alone is important. Moreover it reduces material lost and minimizes the dust problem common to hand filling of hoppers.

Label Gummer

A completely new model King Label Gummer which applies adhesive at a carefully controlled uniform temperature to ungummed labels has been announced by King Sales & Engineering Company.

This 9-inch gummer was designed to cover jobs where



maximum adhering tenacity is required, and for all adhesives which require heat at time of application to the label surface. The glue pot is surrounded by a water jacket in which the water is heated to any desired degree, from room temperature to boiling point, through an adjustable thermostatically controlled heating element.

The manufacturer claims that this method is the most satisfactory in heating adhesives, as the water jacket applies a uniform heat to all areas of the glue pot and prevents any hot spots which would locally burn or break down the adhesive.

A bulletin describing this model (F9-HTR) may be had by writing the factory, King Sales & Engineering Company, 210 First Street, San Francisco 5.

Mixer Bracket
New and Distinguishing Features

1. Split-second adjustment to any desired mixing position for maximum efficiency.
2. Self-contained hand bar locking device locks the Mixer in any operating position quickly, easily, positively and without wrenches, etc.
3. Available with any type Mixer for Alsop Stainless Steel Open Type Tanks from 5 to 300 gallons capacity.
4. Permanently attached yet fully adjustable.

We can furnish any of our sturdy 16 gauge Stainless Steel Tanks with this new fully adjustable, permanently attached Mixer as a complete Mixing Unit. It is permanent, durable and dependably sturdy yet offers all of the flexibility of a Portable Mixer.

This fully adjustable bracket and clamp design is available with all Open Mixing Tanks in sizes from five to three hundred gallons capacity for blending, dissolving and mixing or any type of processing where uniform agitation is necessary.

The all-way swivel action makes for speed and ease in positioning the shaft and propellers to fit the particular kind of agitation to the product and process. Simply lift the hand bar locking device, a few half turns locks the Mixer with its shaft in any vertical angle and any arc of the circle right or left of tank center.

Alsop Complete Mixing Units with the new bracket clamp can be supplied with Direct Drive or Slow Speed Mixers and fitted with many types and combinations of propellers for specific purposes.

Bulletin No. F-506 will be gladly sent to anyone interested by Alsop Engineering Corp., 500 George St., Milldale, Conn.

Heyden PENICILLIN and STREPTOMYCIN

CONSIDER THE SOURCE!

Like an uninterrupted supply of motive power, Heyden Penicillin and Streptomycin serve the medical profession with quality and uniformity that are constant. Through advanced research and manufacturing methods, users of these superior antibiotics are protected against fluctuations in production, price and delivery. For these important reasons, outstanding consumers and packagers alike consider the source—and invariably the answer is Heyden Penicillin and Streptomycin!

PENICILLIN PRODUCTS

Vials: **Crystalline Penicillin G Sodium or Potassium; Crystalline Procaine Penicillin G in Sesame Oil with 2% Aluminum Monostearate w/v (cartridges, single- and multiple-dose vials) (also available in fortified form): Crystalline Procaine Penicillin G for aqueous injection (single- and multiple-dose vials of "PPA") (also available in fortified form).**

Tablets: **Buffered Crystalline Penicillin G Potassium (50,000, 100,000 and 250,000 units, sealed in foil, for oral use).**

Crystalline Penicillin G Potassium Soluble (50,000 and 100,000 units, sealed in foil, for oral use).

Troches: **Crystalline Penicillin G Potassium, (5,000 and 10,000 units, sealed in foil, pleasingly flavored, slow to dissolve).**

STREPTOMYCIN PRODUCTS

Crystalline Dihydrostreptomycin Sulfate (1-gm. and 5-gm. vials).

Dihydrostreptomycin Sulfate (1-gm. and 5-gm. vials).

Streptomycin Sulfate (1-gm. and 5-gm. vials).

OF INTEREST TO MANUFACTURER-DISTRIBUTORS

Heyden's unusual and exclusive service to packagers of Penicillin and Streptomycin products protects YOUR sales and profits under YOUR OWN NAME. Specially designed prescription-type cartons and unit containers are ready for your specific labelling. Technical literature, brochures and instruction inserts are supplied without cost. Write today for detailed particulars.

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225 WEST 34TH STREET, NEW YORK 1, N. Y.

FINE HEYDEN CHEMICALS

READERS' QUESTIONS

WATERLESS HAND CLEANERS: I shall be much obliged if you can let me have information on the manufacture and formulations of a waterless hand cleaning paste. This product should be used simply by rubbing it into the hands, and then wiped off with a clean cloth. No water rinse should be necessary. Johannesburg.

Formulas for such preparations have been published from time to time in our magazine. However, the following is illustrative of processes used in making waterless hand cleaners:

A.	
Glyceryl monostearate	**1.75 oz.**
Sodium hydroxide	**2.50 oz.**
Water	**3.00 qt.**
Heat to boiling.	
B.	
Stearic acid	**2.50 oz.**
Mineral oil	**2.50 oz.**
Paraffin wax	**11.50 oz.**
Spermaceti	**7.00 oz.**
Perfume	**0.20 oz.**

Heat in a double boiler until all is melted. Pour solution B into solution A with constant stirrring, until cold.

A simpler preparation made with soap and a synthetic detergent consists of:

White soap chips	**40**
Anionic detergent	**10**
Water	**500**
Water-soluble perfume oil	**1**

This is a soft paste suitable for filling into collapsible tubes. It may be used directly on the hands and then wiped off with a rag, without the need of using any water.

UREA IN ANTIPERSPIRANT: We would like to know how we can obtain figures on the use of urea in the preparation of antiperspirants as mentioned in Harry Hilfer's article on these preparations. We are thinking of trying out urea with aluminum sulfate in a liquid preparation. Can you give us any further information? Buenos Aires.

Perhaps the best way to answer your question is to cite directly from the Wallace and Hand patent (U. S. Patent 2,236,387), which, as pointed out in Mr. Hilfer's article, is now invalidated. Thus, to make a liquid preparation, dissolve 25 Gm. of aluminum sulfate in 50 cc. of water. To this solution add 15 Gm. of urea and make up to 100 cc. with water.

BATH TABLETS: Recently I came across a bubbling bath tablet. I have tried to formulate a similar compound but without success. Could you help me out on such a formula? New York City.

There are several methods of making compressed bath tablets. One common practice is to make such bath preparations as effervescent tablets: If this is the case, a formula such as the following will serve:

Sodium bicarbonate	**55.0 per cent**
Tartaric acid	**20.0 " "**
Sodium sesqui-carbonate	**20.0 " "**
Perfume and color	**5.0 " "**

Dry all the ingredients thoroughly. Mix and add perfume. Compress and spray the color in alcoholic solution on the finished tablets.

In the event that you should be thinking of using synthetic detergents, I would suggest that you try a combination of a synthetic detergent and a water softening agent or builder such as one of the complex phosphates or one of the carbonates. These can be compressed to form tablets and the rate of disintegration in the bath will be determined by the degree of compression. If you wish, it might be possible to incorporate a disintegrating agent such as starch but this would cause the bath to become cloudy. I cannot be more specific with respect to these tablets, since the several synthetic detergents vary considerably among themselves. I would suggest that you directly contact the manufacturers of such detergents.

WITCH HAZEL CREAM: I would like to obtain a formula for a witch hazel cream, something similar to the products which are sold in England as witch hazel snow. India.

I think that the following witch hazel snow, as given in the February 25, 1950 issue of *Chemist and Druggist*, an English publication, is just what you had in mind:

Stearic acid	**2 oz.**
Potassium carbonate	**65 gr.**
Wool fat	**½ oz.**
Liquid paraffin	**144 min.**
Glycerine (by weight)	**1 oz.**
Solution of hamamelis (by weight)	**10 oz.**
Distilled water (by weight) to	**20 oz.**

Dissolve the potassium carbonate in 6 oz. of hot water and gradually add the solution to a mixture of the stearic acid, wool fat and liquid paraffin, previously melted together with the aid of gentle heat. Stir vigorously for three or four minutes; add the glycerine, previously mixed with the solution of hamamelis and heated to 90°C; stir until cold and beat to a foam.

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Color	white	
Structure	fine powder	
Odor	odorless	
pH	neutral to litmus	
Solubility		
1 gram H_2O	50 cc.	
alcohol	75 cc.	
chloroform	6 cc.	
M.Pt.	235°-237.5°	
Ash	not more than 0.1%	
Heavy Metals	not more than 20 ppm	
Other Alkaloids	none	

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PATENT THOUGHTS AND TRENDS

*by Thomas Cifelli, Jr., Patent Attorney**

Scalp Treating Composition

After the usual battle with the Patent Office for about three years, Francis J. Donnelly of New York succeeded in obtaining a patent (U. S. 2,523,867) covering a scalp treating agent and compositions made therefrom.

Basically, Donnelly's idea is to use 2-ethylhexanediol-1,3 together with an agent which liberates salicylic acid slowly when in contact with the skin and exposed to moisture (i.e. the salicylic acid esters of 2-ethylhexanediol-1,3). In order to get more of the agents in the water which may be present originally in the treating composition and also on the skin in the form of perspiration, an essential oil is used to increase the emulsifying power of the composition.

According to Donnelly, his composition removes dandruff from the scalp, conditions the scalp in general and controls or improves seborrheic (greasy) and psoriasic conditions (patches of scales, what did you think?) commonly affecting the human scalp.

While either the mono- or di-salicylate of the diol may be used, Donnelly prefers to use the monoester because of the greater convenience in manufacture.

A couple of examples illustrate the compositions employed.

Example 1 of the patent reads as follows:

> A composition is made of the following formula: reaction product of 2 parts of salicylic acid U. S. P. with an excess of salicylic acid U. S. P. with an excess of 2-ethylhexanediol-1,3, 9 parts of water, 2 parts of essential oil of the variety known as orange oil, and 2-ethylhexanediol, including the excess referred to above, in amount to make 100 parts total weight of the composition. Any suitable non-toxic perfuming agent may be included.

When no antibiotic action is required in addition to that caused by the diol the following formula is said to work:

> Example 5—The formula is 2-ethylhexanediol-1,3, 89 parts; water 9 parts; and any one of the essential oils described, 2 parts.

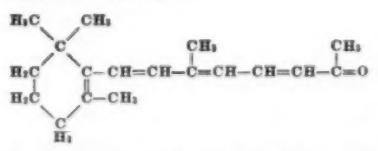
Donnelly succeeded in obtaining a product claim giving him protection on the primary monoester of salicylic acid with 2-ethylhexanediol-1,3. He also received broad protection covering scalp treating compositions comprising the diol, the monosalicylate of the diol and water in solution.

In all there were 14 prior art references cited against Donnelly's patent application, which only goes to show that contrary to what one hears now and then patents are not being handed out willy nilly.

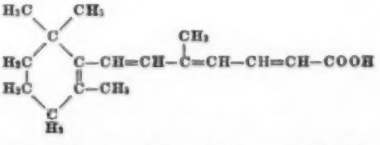
Vitamin A-Related Ketone

Van Dorp and Arens, who have been in the forefront of the synthetic vitamin A work, recently obtained U. S. patent 2,525,568 covering a process for making a C_{18} unsaturated ketone related to vitamin A. An idea of the process involved as well as the coverage can be obtained merely by reading the only claim allowed in the patent. The claim follows:

A process for the manufacture of the unsaturated ketone having the structural formula



from a compound having the structural formula



comprising reacting said compound with methyl lithium, and thereafter hydrolyzing the resulting addition product.

The C_{18}-ketone is not too far removed from vitamin A, having the O in place of the $CHCH_2OH$ terminal grouping of vitamin A. However the so-called C_{21}-ketone, that is the one corresponding to the C_{18}-ketone except that it has a terminal grouping = $CH\text{-}CO\text{-}CH_3$ in place of the O of the C_{18}-ketone, appears to be more closely related to vitamin A. While the C_{21}-ketone and also a ketone called the C_{16}-ketone were disclosed as operable in the process, no protection whatever was obtained in this patent on a process involving either the C_{16}-or the C_{21}-ketones. Of course, it may be that efforts are still being made to obtain protection on these latter two ketones, but it seems more reasonable to assume that such is not the case.

An interesting sidelight disclosed by this patent is that even the "heavyweights" often make mistakes. For, a good bit of the patent is taken up with assertions that Karrer and Heilbron published incorrect information concerning the C_{16}-and C_{18}-ketones.

Patented Skin Preparations

Judging from the number and nature of the comments received in connection with the patent reviews on depilatories, shaving preparations, cosmetic creams and lotions, and dentifrices, such reviews appear to serve a definite need. Accordingly, it is planned to continue such reviews in the drug and cosmetic field.

In line with the foregoing thoughts a review covering U. S. patents relating to skin treating compositions is being started with this issue. The patents to be covered by this review are of more general application than the cosmetic creams and lotions previously published. The limitations of this or any review cannot be stressed too often. It should not be considered exhaustive, although all of the patents classified by the U. S. Patent Office in Class 167, sub-class 90 will be dealt with. Further, the patents are divided into two groups, the first group dealing with expired patents and the second group comprising the unexpired patents, that is those patents which have not run their full course of 17 years. Also, you have to keep in mind always that while a patent may have expired as a legal monopoly, it still stands as a teaching and there-

*Gaylor, Cifelli & Jurick, Newark, N. J.

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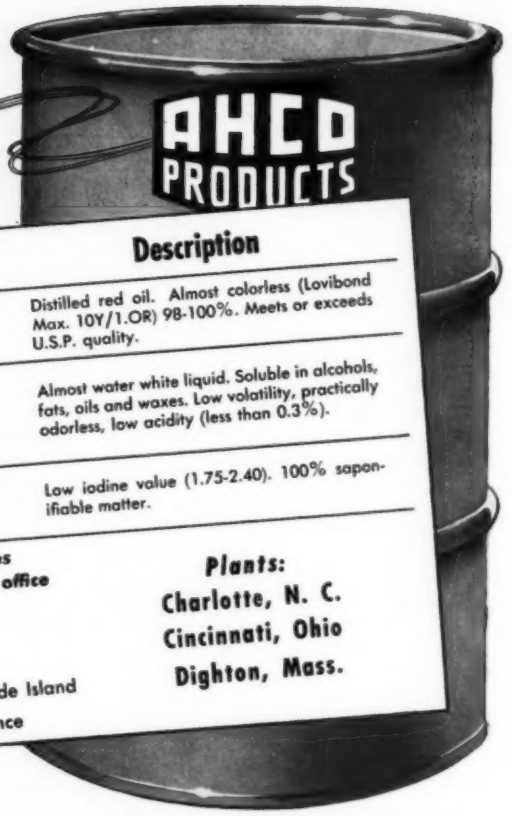

Product	Use	Description
AHCOLEIN 810	Wherever highest quality red oil is required. Soaps, creams, emulsions, etc.	Distilled red oil. Almost colorless (Lovibond Max. 10Y/1.0R) 98-100%. Meets or exceeds U.S.P. quality.
DISTILLED BUTYL STEARATE AND MYRISTATE	Plasticizer and softening agent for Cosmetics.	Almost water white liquid. Soluble in alcohols, fats, oils and waxes. Low volatility, practically odorless, low acidity (less than 0.3%).
TRIPLE PRESSED STEARIC ACID	Cosmetics, Pharmaceuticals, Emulsifying Agents, Esters.	Low iodine value (1.75-2.40). 100% saponifiable matter.

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fore the Patent Office can still cite it against a patent application.

Expired U. S. Patents

U. S. Reissue 3,166—issued October 20, 1868 to John M. Wilson.

Those who yearn for the "good ole days" will probably find it difficult to explain the teachings of this patent to the effect that chlorinated alkalies are just dandy for removing freckles or tan-discoloration from the skin.

U. S. 58,840—issued October 16, 1866 to Thomas C. Lamb.

The use of dyestuffs which require mordants in order to become fixed to textile fabrics for painting the human flesh is disclosed.

U. S. 116,786—issued July 4, 1871 to Julie Desmarques Young.

Cod liver oil is suggested as an agent for use on the face and hands for the purpose of healing, rejuvenating and beautifying the skin, and obliterating all wrinkles.

U. S. 124,018—issued February 27, 1872 to Harriet Z Sill, assigned to herself and Atlee V. Coale.

Terra alba is said to be a substitute for metallic oxides in the preparation of cosmetic compositions.

U. S. 441,009—issued November 18, 1890 to Nettie E. Jenkins.

Articles such as masks or gloves are made from sulphate of cinchonia, salicylic acid, turkey myrrh, hydrastin, benzoic acid, rubber and sulphur.

U. S. 933,395—issued September 7, 1909 to John C. Sherman.

"A saponified milk" is made in the form of a desiccated preparation comprising a mechanical mixture of milk powder, borax, comminuted soap and an abrasive such as corn meal.

U. S. 967,688—issued August 16, 1910 to Charles P. Lowndes Titherley.

This patent discloses as an article of manufacture, a non-drying and hygroscopic skin cleanser consisting of a base of thin fabric slightly moistened with a mixture of 10 pounds of salicylic acid, 5 pounds of borax, 50 to 100 pounds of glycerol and 1 pound of citric acid.

U. S. 1,018,240—issued Feb. 20, 1912 to Richard von Foregger, assigned to The Roessler & Hass-Lacher Chemical Co.

This deals with a greaseless peroxide paste which is stable and contains a trihydric alcohol (glycerin) and a solid peroxide (calcium peroxide.).

U. S. 1,149,777—issued Aug. 10, 1915 to Evan L. Moore.

A composition for application to the hands before engaging in work involving the use of paints, grease and the like or any kind of dirty work is said to result from a paste or emulsion containing gum tragacanth, 7 to 10 lbs., starchy material, 9 to 12 lbs., glycerin, 7 to 10 ozs., and water, 11 to 15 gallons.

U. S. 1,369,997—issued March 1, 1921 to Mary McGuire.

To reduce fatty tissue, this patent suggests a composition comprising a solution in alcohol and witchhazel of alum and camphor in substantially the proportions of alum twelve ounces, camphor two ounces, alcohol twelve ounces and witchhazel thirty-two ounces.

U. S. 1,511,874—issued Oct. 14, 1924 to Josef M. Eder.

In order to protect the skin against the action of light of short wave length this patent suggests the use of derivatives of naphthalene which display a blue fluorescence, for example, the naphtholsulphonic acids and their salts.

U. S. 1,513,233—issued Oct. 28, 1924 to Rose P. Fant.

To make a cuticle and nail salve the following formula is given: boracic acid one part, powdered alum one part, bicarbonate of soda two parts, vaseline six parts, glycerin two parts and spermaceti wax eight parts.

U. S. 1,516,820—issued Nov. 25, 1924 to William A. Johnson and Arthur W. Roberts.

The idea of this patent is to provide a material for filling the pores of the skin of the hands or face for the purpose of preventing dirt, grease, paint or other foreign matter from permeating the pores and adhering to the skin. The formula follows: dextrine, 50 grams, soap, 8 grams, colophony, 10 grams, phenol, 5 drops, water, 3½ ounces.

U. S. 1,574,733—issued Feb. 23, 1926 to David R. Kellogg, assigned to Peterson-Kintner Co.

The basic object of this patent is the same as that of U. S. 1,516,820, and the suggested composition is bentonite 10-20 percent, soap 2-12 percent, and water 75-85 percent.

U. S. 1,581,317—issued April 20, 1926 to Ralph Kirkman.

In order to make a cuticle remover in homogeneous and substantially stable paste form, this patent suggests mixing starch, potash and water and heating the mixture slowly to a point above the starching temperature. One formula given is 6 parts of alkaline starch, 8 parts of glycerin, 2 parts of potassium hydroxide and 84 parts of water.

U. S. 1,614,211—issued Jan. 11, 1927.

To make a face rouge this patent suggests a mixture of an oil-soluble red pigment insoluble in water, and a dry white powder in substantially the proportions of six ounces by weight of the pigment to twenty pounds by weight of the white powder.

U. S. 1,638,709—issued Aug. 9, 1927 to Newton H. Schneider.

To make an acid-resisting compound this patent suggests mixing white lead with linseed oil and thinning with gasoline, adding baking soda thereto and mixing, and as a separate step heating resin and adding thereto castor oil, combining the white lead and baking soda mixture with the heated resin and mixing, and finally thinning with alcohol and eucalyptus oil.

U. S. 1,649,326—issued Nov. 15, 1927 to Newton H. Schneider.

This is similar to U. S. 1,638,709, the patent here teaching that an acid-resisting composition for the treatment of the hands can be made from baking soda 12 ounces, resin 1 pound, Venice turpentine 2 ounces, turpentine 4 ounces, castor oil 1 ounce, alcohol 3 ounces.

U. S. 1,655,369—issued Jan. 3, 1928 to John H. Helfrich.

A rouge compact is made in the form of a stiff paste comprising a color vehicle, a mineral oil and a binder, in the proportions of 18# of color vehicle to 100 cc. of mineral oil to 1200 cc. of binder, said binder containing originally 20 grams of powdered gum arabic to one gallon of water; said color vehicle comprising domestic talc free from silica, heavy imported chalk, and yellow ochre in the proportions of 99# talc to 9# chalk and 15 oz. yellow ochre.

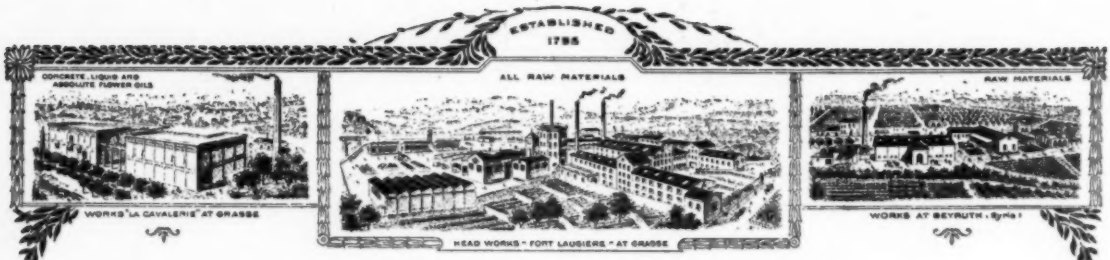
U. S. 1,669,016—issued May 8, 1928 to Edwin H. O'Neil, assigned to Charles E. Bill.

This deals with a deodorant to be applied to the body composed by weight of substantially one part each of zinc oxide and boric acid and two parts of a waxy binder containing substantially two parts of a wax and one of petrolatum, molded in stick form and adapted to rub off in a smooth even film when applied.

U. S. 1,697,936—issued Jan. 8, 1929 to Ernst Teupel, assigned to Theodor Otto.

This patent teaches a paste adapted to protect surfaces from dust, dirt and other substances otherwise tending to adhere thereto and to penetrate therein, said paste being composed of 18 parts of sodium soap, 9 parts of potassium soap, 22 parts of water-glass, 12 parts of talcum, and 90 parts of 20 percent alcohol.

(Continued on page 704)



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YOUR TRADE-MARK RECORD

by John H. Graham
International Patent and Trade-Mark Consultant

What Are the Chances of Success on Appeal in Trade-mark Cases?

Frequently, the question is brought up as to what chances, if any, a party has in appealing a decision of the Patent Office, in a trade-mark matter.

Usually, opinion is equally divided between those who believe there is still a chance and the others who contend it is just throwing good money after bad to go to appeal.

These others are not necessarily born pessimists. Their ideas are based on the factual evidence that in the majority of cases, the judgment of the U. S. Court of Customs and Patent Appeals is to uphold the Examiner and the Commissioner of Patents.

There is an obvious reason for this. First of all, the Examiner's experience and training has given him a great insight into what is and what is not permissible in trade-mark matters. The Examiners who handle your marks are seasoned veterans who know their jobs.

Granted that in trade-mark matters, more than any other form of industrial property, there is more chance of it being a matter of personal opinion, yet, dealing daily with a variety of marks, of situations and conflicts, the Examiner is in a position to gauge the values of your mark against another. Having carefully studied decisions in other cases, he is usually able to make a definite decision for or against a mark.

In those cases where there is a real doubt, very often the Examiner will give the benefit of doubt to the trade-mark applicant. Then it is up to a higher tribunal to make a concrete decision.

That appealing is worth while however is made evident by a recent decision of the U. S. Court of Customs and Patent Appeals. In this decision given below, the decision of both the Examiner and the Commissioner of Patents to refuse the mark was reversed.

Without bothering with the names of the two contestants, since they are not in our own field of endeavor, the facts are as follows. There existed two registered trade-marks, LADY IN WAITING and ANNIE AT THE GARDEN GATE, both for dolls.

Another doll manufacturer adopted and registered GARDEN LADY. Thereafter, an opposition suit was instigated and the Examiner and subsequently the Commissioner of Patents, considered that the marks were too close for similar goods, so that GARDEN LADY was refused. However, on appeal the refusal was reversed and the owners of GARDEN LADY were granted their registration.

The arguments were based upon lack of similarity of the marks. The Court said "We can not agree with the reasoning of the tribunals below, because, even though the two marks GARDEN LADY and ANNIE AT THE GARDEN GATE might convey an impression of a garden scene, they are utterly unlike in sound, meaning and appearance. There is no likelihood, in our opinion, that the concurrent use of the marks of the parties on their respective goods will cause confusion in trade or deceive purchasers."

Thus, despite the opinion to the contrary of the Examiner and of the Commissioner of Patents, the mark was deemed clear of conflict.

In the same breath however, two other appeals only resulted in comfirmation of the decisions rendered by the Examiner and Commissioner of Patents, respectively.

It was held that RITE-RITE and RITE-CRAFT as applied to pencils and pens could both exist without likelihood of confusion and deception of the public. The reasoning behind this decision was the RITE meant WRITE when applied to pens and pencils and as such, no single person could appropriate the word as a trade-mark to the exclusion of others.

In other words, it was considered descriptive and only the affix was therefore to be considered.

In like manner, in United Drug Co. versus The Mercirex Co., the Examiner's decision, confirmed by the Commissioner, was upheld by the U. S. Court of Customs and Appeals.

As is well known, United Drugs have a group of trade-marks including the word REX and REXALL for various drugs. MERCIREX was applied for as a trade-mark for drugs manufactured by the Mercirex Co.

It was held that while the word REX forms one part of MERCIREX trade-mark, since it is not set out separately nor emphasized, the concurrent use of MERCIREX and REXALL or REX would not be likely to cause confusion in trade or to deceive purchasers.

It was also held that while the portion MERCI—of Mercirex's mark might be suggestive of one of the ingredients shown on their label, anyone who would scrutinize the label on the product to determine the ingredients of the ointment, would be informed thereby of the particular products.

Thus, we have two decisions affirming and one reversing all in one same month (May 1950). The proportion of "reversing" to "affirming" is much lower than this for the reasons advanced hereinbefore. But sometimes, as will

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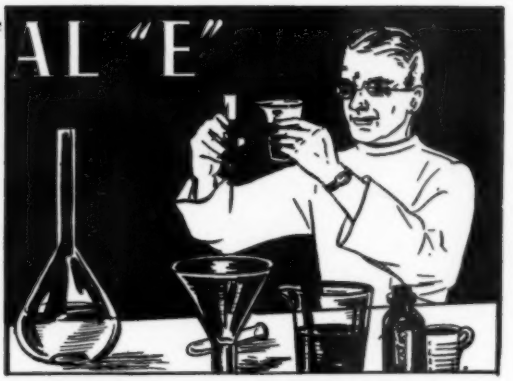

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be seen from the reversing decision, it is worth the cost and trouble of an appeal.

If the mark is of sufficient importance or of such financial value that appeal is warranted, then the chance is well worth taking.

Certainly, as is proven by the above, the Court of Appeals will not slavishly follow the decisions handed down by the Patent Office, but will determine the decision in the face of the pertinent facts.

The following Trade-Marks were recently published in the Official Gazette of the United States Patent Office.

Arkana's—51—H—575,033
Arkana's Products, Washington, D. C.
Ser. Mar. 8, 1949 D. U. Nov. 5, 1946

Boris—51—C—576,215
Armande Luciene, Beverly Hills, Calif.
Ser. Mar. 28, 1949 D. U. Dec. 9, 1936

Cinderella Magic Wand—51—BC—569,744
Cinderella Unusual Cosmetics, Inc., Memphis, Tenn.
Ser. Dec. 2, 1948 D. U. Nov. 9, 1948

Crisance—51—ABCHK—578,751
Wolff Freres, Inc., DBA Wolff Freres, N. Y., N. Y.
Ser. May 12, 1949 D. U. Apr. 30, 1949

Cue—52—A—568,096
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Nov. 3, 1948 D. U. Oct. 4, 1948

Djinn—51—576,267
Mainbocher Perfumes, Ltd., N. Y., N. Y.
Ser. Mar. 29, 1949 D. U. Mar. 22, 1949

Double Play—51—CE—587,244
Chen Yu, Inc., N. Y., N. Y.
Ser. Nov. 3, 1949 D. U. Sept. 26, 1949

Encharma—51—C—569,040
Armour & Co., Chicago, Ill.
Ser. Nov. 19, 1948 D. U. Mar. 6, 1923

Everything's Rosy—51—E—578,283
Revlon Products Corp., N. Y., N. Y.
Ser. May 5, 1949 D. U. Apr. 14, 1949

Fearonce Indian Sage—51—H—530,428
Royal Barbers & Beauticians Supply Co., Inc., Phila., Pa.
Ser. July 27, 1948 D. U. Jan. 1938

Golden Chance—51—ABC—558,717
Harriet Hubbard Ayer, Inc., Assignor to Lever Bros., Co., N. Y., N. Y.
Ser. June 8, 1948 D. U. May 7, 1948

Golden Violin—51—B—588,365
Consolidated Cosmetics, Chicago, Ill.
Ser. Nov. 26, 1949 D. U. Dec. 10, 1932

Harlequin—51—B—588,761
Richard Hudnut, N. Y., N. Y.
Ser. Dec. 3, 1949 D. U. Nov. 1, 1949

Henri de France—51—BCH—569,760
Fernand Wm. Lemasson, Paris, France
Ser. Dec. 2, 1948 D. U. Dec. 23, 1943

Hunts—52—AH—531,394
Bauer & Hunt, Inc., N. Y., N. Y.
Ser. Jan. 21, 1949 D. U. Sept. 24, 1948

Jean Nate—51—ABI—574,588
Jean Nate' Inc., N. Y., N. Y.
Ser. Feb. 26, 1949 D. U. July 6, 1932

Kaleidoscope—51—B—589,094
Richard Hudnut, N. Y., N. Y.
Ser. Dec. 9, 1949 D. U. Nov. 22, 1949

Lucky Find—51—C—577,055
Richard Hudnut, N. Y., N. Y.
Ser. Apr. 13, 1949 D. U. Mar. 16, 1949

Marlo—6-18-51-52—ACIM—509,858
Marlo Products Co., Cleveland, Ohio
Ser. Sept. 27, 1946 D. U. Dec. 6, 1921

Mennen Baby Powder—51—C—(And Des.)
The Mennen Co., Newark, N. J.
Ser. Apr. 15, 1948 D. U. April 1947

Mennen Talcum For Men—51—I—531,381 (And Des.)
The Mennen Co., Newark, N. J.
Ser. Apr. 15, 1948 D. U. April 1946

New Ray—51—H—573,095
Raymond Labs., Inc., St. Paul, Minn.
Ser. Jan. 31, 1949 D. U. Jan. 4, 1949

One Moment—51—BI—581,736
L. G. Rothchild, DBA Lenel Co., Dallas, Tex.
Ser. July 9, 1949 D. U. 1944

Or et Noir—51—BC—583,427
Caron Corp., N. Y., N. Y.
Ser. Aug. 13, 1949 D. U. Aug. 9, 1949

Rayette—51—H—573,097
Raymond Labs., Inc., St. Paul Minn.
Ser. Jan. 31, 1949 D. U. Jan. 4, 1949

Ritz—51—C—582,819
Charles Of The Ritz, Inc., N. Y., N. Y.
Ser. Aug. 2, 1949 D. U. Since 1925

S—51—BCEH—579,218 (And Des.)
Stanley M. Sargeant, Highland Mills, N. Y.
Ser. May 20, 1949 D. U. Jan. 15, 1928

Snob—51—B—590,696
Jean Patou, Inc., N. Y., N. Y.
Ser. Jan. 11, 1950 D. U. Jan. 4, 1950

Teston—51—CHI—554,255
J. J. Pomeranz, Helsingfors, Finland
Ser. Apr. 9, 1948 D. U. Apr. 6, 1944

Thine Alone—51—CH—565,869
Consolidated Cosmetics, Chicago, Ill.
Ser. Sept. 25, 1948 D. U. Aug. 31, 1948

This and Heaven Too—5—1B—578,587
Fontaine Perfume Corp., N. Y., N. Y.
Ser. May 11, 1949 D. U. Mar. 12, 1948

Timballigninele—51—C—580,282
Marie J. Cade, N. Y., N. Y.
Ser. June 11, 1949 D. U. Dec. 21, 1948

Victor—51—B—568,413
Victor, S.R.L. Milan, Italy
Ser. Nov. 8, 1948 D. U. Jan. 23, 1946

Wand—51—BC—574,802
Wolf & Dessauer Co., Fort Wayne, Ind.
Ser. Mar. 2, 1949 D. U. Apr. 23, 1932

Winwood—51—H—574,748
Winwood Pharmaceutical Corp., Allendale, N. J.
Ser. Mar. 11, 1949 D. U. Feb. 10, 1949

With Pleasure—51—BC—583,428
Caron Corp., N. Y., N. Y.
Ser. Aug. 13, 1949 D. U. Aug. 9, 1949

Act of 1946

The following Trade-Marks have been recently republished under the terms of the above (Lanham Act). No opposition can be filed against them but they are all subject to cancellation proceedings.

Bee Brand—51—I—103,591
Reg. Apr. 6, 1915 to McCormick & Co., Baltimore, Md.
Repub. by registrant

Intoxication—51—BC—397,545
Reg. Sept. 8, 1942 to D'Orsay Sales Corp.
Repub. by S. A. Compagnie Francaise Des Parfums D'Orsay, Puteaux, France

Kolor-Bak—51—H—111,737
Reg. Aug. 1, 1916 to The Kolor Bak Products Co.
Repub. by Consolidated Cosmetics, Chicago, Ill.

READERS' QUESTIONS

HAIR STRAIGHTENERS: I would appreciate it very much if you would send me a formula for a hair straightener using the newer chemicals. I have made a preparation of yellow wax, petrolatum, peanut oil, etc., but it is not very effective. Brooklyn.

Most of the newer processes for straightening the hair are based on modifications of the cold wave process. Methods of this sort are covered by patents. However, if you wish a specific formula for another type of hair straightener, different from the one you are using, I would suggest that you try the following:

Petrolatum	**90 lbs.**
Rosin (W. G. grade)	**10 lbs.**
Perfume	**2 lbs.**

Melt the rosin with the petrolatum at 135°F. Stir well. Cool slightly. Add the perfume, mix and fill 5°F. above the congealing point.

NAIL POLISH REMOVER: I would like to have a formula for a nail polish remover containing acetone and olive oil. Louisville.

Nail polish removers along the lines you indicate may consist of equal parts of acetone and ethyl acetate or of equal parts of acetone and isopropyl alcohol. As emollients, two to three per cent of a vegetable oil may be added to the solvent mixture and in your case the oil would be olive oil. However, it is more common to use castor oil for this purpose, as well as various other substances. Acetone is not as widely used as formerly, therefore, I think you will be interested in the following formula for a more modern type of nail polish remover:

Ethyl acetate (b.p. 77°)	**5 parts**
Dibutyl phthalate (b.p. 340°)	**4 parts**
Castor oil	**1 part**

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Protection Against Sunburn

B. Russell and D. Anderson (*Lancet* 2:247, 1950) have investigated the protective effect of a number of sun-radiation screening-agents when incorporated in different bases. They studied the absorption spectra of the preparations and their effect on a sensitive person when exposed to sunburn-producing rays, and found that protection against sunburn is provided most conveniently by a vanishing-cream base containing tannic acid, 5 per cent; quinine hydrochloride, 5 per cent; Pyribenzamine (tripelennamine), 5 per cent; sodium *p*-aminobenzoate, 10 per cent; salol, 10 per cent; or yellow soft paraffin, 50 per cent.

Tannic acid is the sun-screen of choice. For one thing, it is least likely to cause contact eczema. After tannic acid in that respect follow in order, sodium *p*-aminobenzoate, tripelennamine, and quinine. Sodium *p*-aminobenzoate should not be used if there has been sensitization to sulfonamides or benzocaine. Yellow soft paraffin was found an effective screen in a proportion of 50 per cent or more but its occlusive and "heating" properties sometimes caused discomfort. In proportions below 25 per cent, soft paraffin had an intensifying effect in the sunburn spectral range.

Of the several bases studied, the following vanishing cream base was recommended as a stable emulsion of good cosmetic quality:

Stearin	**25.0**
Triethanolamine	**1.0**
Glycerine	**10.0**
Oil of theobroma	**1.0**
Cetyl alcohol	**0.5**
Distilled water	**62.5**

To be dispensed in an airtight container.)

The cream was tested clinically as a carrier of 5 per cent tannic acid and 5 per cent sodium *p*-aminobenzoate. A layer about 0.1 mm. thick of the two creams was spread over four areas of skin on the patient, and the total area exposed to irradiation. The areas covered by both creams received complete protection, whereas the bordering areas of skin to which no cream was applied underwent an erythematovesicular reaction.

In unusual cases of sensitization (e.g., solar urticaria) due to the visible violet-blue range of the spectrum, those screening substances were only partially effective and Russell and Anderson suggest the use of physical screens such as calamine, zinc oxide, bismuth subcarbonate, titanium dioxide, ichthammol and the like. The application of such materials is indicated in the following formulas:

(1)

Calamine	**15**
Zinc oxide	**5**
Bentonite	**2**
Glycerin	**5**
Distilled water, to make	**100**

(2)

Titanium dioxide	**15**
Bentonite	**10**
Glycerin	**5**
Distilled water, to make	**100**

Preservation of Lard

According to E. Sandill and B. Spross (*Svensk farm. Tidskr.* 54:61, 1950, through *J. Pharm. & Pharmacol* 2:449, 1950) lard, if freshly prepared and of low peroxide content, may be effectively preserved by the addition of 0.005 per cent of hydroquinol, nordihydroguaiaretic acid, or propyl gallate. Benzoin, at a concentration of 0.3 per cent, is also satisfactory, and better than guaiacum resin at the same concentration. The preservative action of diphenylamine, hardened peanut oil, or of α-tocopherol was only slight, while α-tocopherol, which showed a preservative action under accelerated test, was found to give, under storage conditions, no better stability than lard without any addition. When water was incorporated with the lard a larger proportion of anti-oxidant was necessary (at least 0.03 per cent). In alkaline solution (e.g., in presence of borax), these anti-oxidants cannot be used, as hydroquinonol is ineffective and nordihydroguaiaretic acid and propyl gallate, although giving some protection at high concentrations, cause discoloration. In this investigation the question of possible toxicity of the stabilizers was not considered.

Wax from Douglas Fir Bark

According to a report in *Chemurgic Digest* for July, 1950, Douglas Fir bark, formerly burned in Oregon as a waste product, now is being treated for its wax. Using a process discovered by E. F. Kurth, chemist of the Oregon Forest Products Laboratory, Corvallis, the Oregon Wood Chemical Cmpany is attempting the first large-scale production of a true wax other than beeswax ever made in the U. S. Chemists have compared the new product with beeswax, the world's largest source of true wax, stating that the new vegetable wax is equal in nearly all tests, based on preliminary analyses.

Kurth has proved that Douglas Fir bark contains from 5 to 10 per cent wax, depending on age of bark and other factors. It is extracted by pumping hot benzene through a tank charged with ground bark. The solvent and wax, which it removes, are pumped into a second tank where benzene is separated from the dissolved wax by steam distillation. Douglas Fir bark wax varies in color from light tan to deep red, although it can be refined nearly white. It has a pleasant odor. It is hard, non-tacky, has a melting point of from 140 to 145° F., and is harder than beeswax but not so hard as carnauba. Chemically it consists of about 20 per cent lignoceryl alcohol; 60 per cent lignaceric acid; and 20 per cent ferulic acid. Its specific gravity is 1. Semi-refined wax has a faint taste of spruce and an odor of balsam. It can be recovered best from old growth fir bark in varying amounts depending upon the process used, condition of bark and solvent employed. It dries with a tough, brilliant elastic film. Already many uses have been found for the wax, including polishes, ski wax, ointments, lubricants, soaps, art and sculpture work, preservatives, and a score of similar applications.

Details on the composition of the wax in Douglas Fir bark are given by Kurth in the *Journal of the American Chemical Society* (72:1685, 1950).

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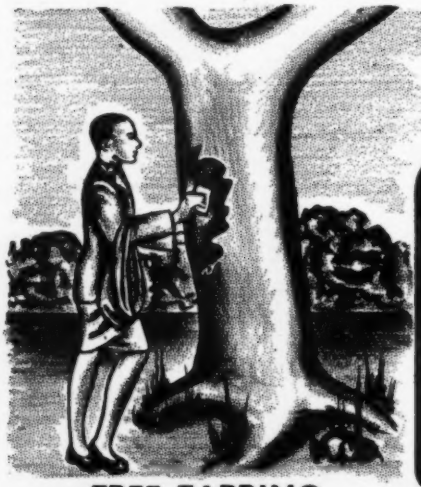

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Isopropyl Myristate

Isopropyl myristate, says C. Morel (*Soap, Perf. & Cosmetics* 23:819, 1950), is becoming increasingly familiar and is outstanding among the fatty acid esters of low molecular alcohols. Isopropyl myristate, also referred to as I. P. M., is a very slightly viscous, clear, practically colorless liquid with a faint but persistent fatty-nutty odor. It has a specific gravity of 0.85. Its solidifying point varies according to origin and exact composition, but is usually below 0°C. Consisting mainly of a mixture of the isopropyl esters of myristic, lauric and palmitic acids, the material is insoluble in water, has a limited solubility in ethyl alcohol, and is readily miscible with mineral and vegetable oils, fatty alcohols and waxes. As compared to oils for certain applications, isopropyl myristate shows a number of advantages. Thus, it is not prone to rancidity. It is emollient but not greasy; it is absorbed by the skin to a noticeable extent and it improves adhesion to the skin and facilitates ease of application. I.P.M. assists in the wetting of pigments. It is also a mutual solvent for mineral and vegetable oils and waxes and is generally valuable as a solvent and "coupling agent" for a wide variety of materials. In suitable formulations, it exerts a thixotropic effect. Despite its comparatively low melting point, the material is not too volatile. Isopropyl myristate is said to be physiologically harmless and nonirritating, even to abraded skin. Indeed, the compound has been suggested as suitable for pharmaceutical use, as an ointment base of emollient, non-greasy type, with excellent solvent powers for a wide variety of drugs and other medicaments.

From a consideration of these properties it is evident that isopropyl myristate has potential applications in quite a number of cosmetics and toilet preparations. One of the most obvious of these is its possibilities in the formulation of cake make-up. This is indicated in the following formula which Morel offers as a starting point for further experimentation:

Carnauba wax, first grade	**9 parts**
Cetyl alcohol	**2 "**
Mineral oil, light	**5 "**
Isopropyl myristate	**40 "**
Titanium dioxide	**24 "**
Talc	**12 "**
Color pigments	**7 "**
Rose/sweet pea perfume	**1 part**

The preparation of such products consists essentially of incorporating pigments and powders in a molten mixture of wax, fatty alcohol (optional), mineral oil (optional) and I.P.M. Milling, reheating, perfuming and pouring into suitable containers, complete the sequence of operations. The isopropyl myristate imparts good texture and consistency, enhances the thixotropic effect and improves applicability in an even film on the skin.

Another interesting variation is the improved modern version of the old-style grease paint stick, i.e., make-up in stick form. Such products are of particular interest for application to limited areas, e.g., as blemish-covering agents. The following basic formula may be used as a base for experimentation:

Isopropyl myristate	**30 parts**
Mineral oil, light	**5 "**
Lanolin	**3 "**
Cetyl alcohol	**2 "**
Ozokerite	**10 "**
Zinc oxide	**32 "**
Color pigments	**7 "**
Kaolin	**10 "**
Perfume compound	**1 part**

In this, as in the previous basic formula, the perfume content may be reduced to 0.5 per cent if desired.

The ready absorption of isopropyl myristate by the skin, coupled with its emollient but non-greasy character and other properties, makes it eminently suitable for use in face creams. In vanishing creams it may be utilized in proportions ranging from approximately 3 to 7 per cent. It improves the "vanishing" effect, is readily emulsified, and imparts a desirable non-greasy but softening feel to the skin. In all these respects it has proved superior to butyl stearate. Its usefulness in this connection is illustrated by the following formula for an emollient cream, as originally given by Janistyn:

Beeswax	**10.0 parts**
Paraffin wax	**5.0 "**
Lanolin, anhydrous	**4.0 "**
Cetyl alcohol	**1.0 part**
Wool wax	**1.0 "**
Sesame oil	**25.0 parts**
I.P.M.	**15.0 "**
Borax	**0.9 part**
Perfume	**0.5 "**
Preservative	**0.05 "**
Distilled water	**37.55 parts**

The first seven constituents are melted with the preservative and gradually mixed at 80° C. with the aqueous phase (borax and water) at the same temperature. Perfume is added at about 50° C., stirring is continued, and the mass is poured into containers at a temperature of 40° to 45° C.

Morel is of the opinion that in hair frictions and lotions with an alcoholic base, the effect of 5 per cent or so of I.P.M. is to reduce excessive greasiness. It could also find application as an emollient in certain cream and liquid soapless shampoos.

One of the more obvious uses for this versatile material is as a mutual solvent or coupling agent in lipsticks for mixtures of mineral and vegetable oils and waxes. Although not a good solvent for bromo-acid, it assists the dispersion of lakes and reduces the greasiness of the stick on application, without affecting its gloss. From 6 to 12 per cent can give highly satisfactory results and a very pleasant "feel" on application. Other suggested outlets for I.P.M. lie in the direction of bath oils, hand creams, brushless shaving creams, hand lotions and beauty milks, cream and dry rouge, mascara—and practically the entire range of theatrical and movie make-up.

Skin Shield for X-Ray Treatments

In the *Archives of Dermatology and Syphilology* (62:237, 1950), J. W. Wilson points out that during the treatment of a cutaneous lesion with roentgen rays it is customary to shield the surrounding normal tissues with a sheet of a heavy metal, such as lead or tin, or a sheet of rubber containing a high proportion of such a metal. By means of scissors, openings of appropriate shape are cut in this material to fit the irregularities in the contour of the lesion. To overcome the difficulties and waste inherent in such methods, he recommends the use of a plastic, putty-like clay containing 84 per cent bismuth subnitrate and 16 per cent anhydrous wool fat for shielding the surrounding normal skin while a lesion is treated by roentgen radiation. This substance is 62 per cent as efficient in stopping radiation as is pure lead; hence a layer one and one-half times as thick is equivalent. For ease in handling, 5 mm. is the preferable thickness; this is equivalent in shielding efficiency to 3.2 mm. of lead.

A method of forming a disk of the clay in a compression paddle is described by Wilson with details of the manner of using it. Simple pressure of the fingers serves to increase or decrease the size of the opening in relation to the lesion, resulting in easy and accurate adaptation. There is no waste in using this method since the original quantity of clay can be used indefinitely.

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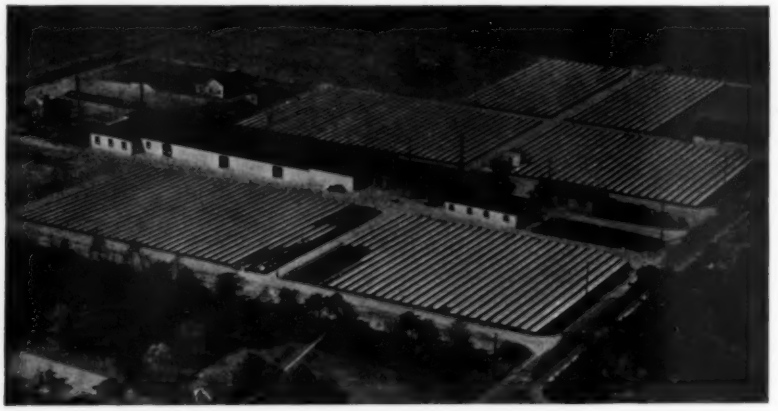

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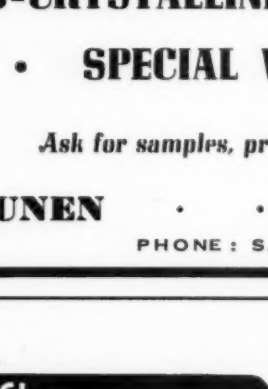

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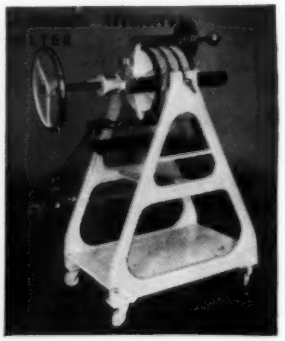

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ADVANCING THERAPY

Ion Exchange Resins vs Edema

In a report delivered at the 918th meeting of the American Chemical Society, E. W. McChesney, F. C. Nochod and M. L. Tainter stated that the two principal medical applications of ion exchange resins thus far developed are neutralization of gastric hyperacidity and blocking the absorption of sodium in cardiac or nephritic edema. For the former, anionic exchange resins of the weakly basic type are used. The pH of the gastric contents rises rapidly, and the adsorbed hydrogen ions are subsequently released in the intestine. Good results are claimed in the relief of peptic ulcer.

In discussing the newer use for these resins, they point out that in the edematous patient the problem is to prevent the absorption of sodium, so that the edema fluid will be drawn upon to provide the sodium which is excreted. For this purpose cationic exchange resins in either the $NH4^+$ or H^+ form may be used. There is adequate laboratory evidence to show the efficacy of these resins in decreasing urinary sodium, while increasing the fecal output correspondingly. Potassium is also bound, depending on the Na/K ratio in the gut; the effect on calcium absorption is variable. Human edematous patients, on a somewhat restricted salt diet, have been successfully treated by feeding amounts of resin ranging from 50 to 100 Gm. per day. There is adequate laboratory and clinical evidence to show that the resins are innocuous, even in the rather large doses required.

PABA in Rheumatic Fever

The potential value of para-aminobenzoic acid or PABA in the treatment of acute rheumatic fever is indicated in the report by R. J. Hoagland (*Am. J. Med.* 9:272, 1950). He notes that high blood level of salicylates is believed to produce optimum results in the treatment of acute rheumatic fever. The blood level of salicylates is increased by the simultaneous administration of PABA. In adition, PABA itself may have a beneficial action on the disease process of rheumatic fever. Therefore, when response to salicylates is unsatisfactory, a patient with rheumatic fever should receive PABA in addition. Beneficial effect should be manifested by the disappearance of symptoms and fever.

These views are illustrated by details of a case of rheumatic fever with refractoriness to 10 Gm. of aspirin daily manifested by an uninterrupted fever for five weeks which showed dramatic improvement after the addition of para-aminobenzoic acid in a dose of 24 Gm. daily.

Hormone-Like Licorice Extract

During the war, it was noticed that many patients suffering from peptic ulcer improved after taking a proprietary medicine containing licorice juice, anise, and reduced iron purchased from a local pharmacist in a small Netherlands town. In 1945 the stocks of licorice ran out and supplies could no longer be obtained; two years later, when licorice was again available, the same favorable results were noted, but this time serious side-effects were observed.

An investigation was therefore begun by J. A. Molhuysen and his colleagues (*Lancet* 2:381, 1950) to determine the pharmacological action of licorice juice. Controlled tests on nine patients conducted over eighteen months showed that the main effect of licorice juice was stimulation of the renal tubules to an excessive reabsorption of water and chlorides, and probably also of sodium. Hemoglobin and total serum-protein also decreased, venous pressure, blood pressure and pulse-pressure rose considerably, and the output of potassium was much increased. Similar results were obtained in a patient who received an equivalent amount of a purified product prepared by alcohol extraction and acid precipitation.

The effects observed were identical with those obtained by injection of A.C.T.H. or of large doses of deoxycortone, except that they lasted longer, and the blood pressure tended to remain raised after the drug had been discontinued unless a salt-free diet was given. A patient with Addison's disease who did not respond to A.C.T.H. did not respond positively to licorice juice —there was a slight negative response.

The investigators point out the danger, particularly in elderly patients, of potassium loss on the heart muscle resulting from taking licorice, and explain the occurrence of cardiac asthma in patients taking the drug.

Although much information was obtained, many questions remain unanswered. For example, information is lacking as to the nature of the active principle responsible for the action; nor is it known whether the difference noted in response to the licorice was due to differences in destruction by the juices of the digestive tract, to differences in absorption, or to considerable differences in individual sensitivity to the drug. Nevertheless, as noted editorially in the *Lancet*, the discovery of a vegetable extract which reproduces the actions of a steriod hormone offers opportunities that will not be ignored by the pharmaceutical industry.

Medication for the Depressed Patient

Management of the depressed patient with the aid of a new medication is described by H. V. Grahn in the *American Practitioner* (1:795, 1950). Eighty-five patients with symptoms of depression or anxiety were treated with a preparation combining d-amphetamine and amyl-ethyl barbituric acid. This combination has a tranquilizing effect that seems to neutralize extremes of mood, giving the patient a more normal outlook and behavior. Excellent or very satisfactory results were secured in almost every case where the symptoms were within "neurotic" limits; in active psychoses, the drug had little or no effect.

The preparation was supplied in two strengths: d-amphetamine 5 mg., with amyl-ethyl barbituric acid ½ gr., and with amyl-ethyl barbituric acid 1½ gr. It might be noted that the preparation used at first contained the sodium salt of amyl-ethyl barbituric acid, which is the form commonly used in psychiatry because it is soluble and therefore injectable. Later batches contained plain amyl-ethyl barbituric acid. There was no detectable difference in effect between these two forms of amyl-ethyl barbituric acid as used with the d-

THE THIRD EDITION OF
MODERN COSMETICS

MODERN COSMETICS, published by the Drug & Cosmetic Industry, was the first book on the formulation and manufacturing procedure of cosmetics to be published in America. It was an immediate success. In two previous editions eight thousand copies were sold in America and in forty-two foreign countries.

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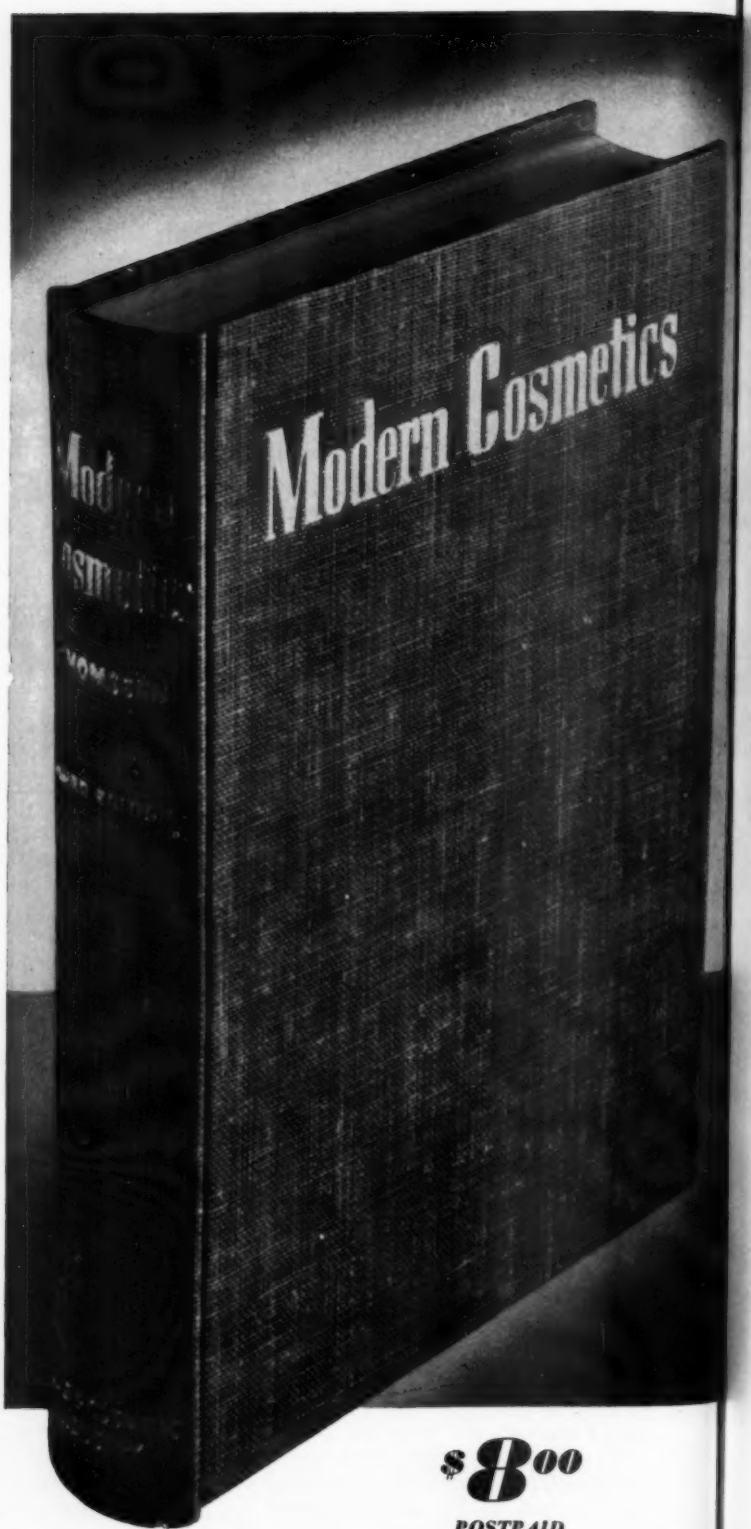

MODERN COSMETICS

by **E. G. THOMSSEN**
B.S. A.M. Ph.D.

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amphetamine. A great deal of experimentation with the dosages supplied, and with other combinations (ranging from d-amphetamine 2½ mg. with amyl-ethyl barbituric acid ¼ gr. to d-amphetamine 10 mg. with amyl-ethyl barbituric acid 1½ gr.), indicated that the most useful dosage for the average case of mild depression or anxiety is d-amphetamine 5 mg. with amyl-ethyl barbituric acid ½ gr. In the more severe anxiety states, however, when irritability, excitement or insomnia is pronounced, it is sometimes necessary to use heavier sedation.

Grahn feels that the preparation is best used as a temporary measure, to alleviate depression or anxiety sufficiently so that the patient will make an effort toward solving his problems or facing them in some more healthful manner.

Dermatologic Treatments for Fungus Infections

Following a two-year's study by an army dermatological research team a summarized report of their findings was published in the *Journal of the Royal Army Medical Corps* (94:265, 1950, through *Pharm. J.* 165:146, 1950). The following preparations are recommended for fungous infections of the skin:

Chrysarobin 4 per cent in Lassars' paste.—This is considered to be the preparation of choice; 6 per cent can be used in resistant cases. The patient should be warned that the skin becomes abnormally photosensitive at the site of application.

Phenylmercuric acetate or chloride 0.5 per cent in Eucerin or Lassar's paste.—This preparation was found to be potent, but it tended to cause severe irritation and blistering. It should be used only by an experienced dermatologist.

Salicylic acid 6 per cent and benzoic acid 12 per cent in a starch-paraffin base.—Although this has a high potency, its routine use is limited, as it is apt to cause irritation and burning.

For the treatment of fungous infections, paraffin-starch pastes were found to be the most effective base. They have the advantage over the newer water-miscible bases of remaining on the skin for long periods of time, since they are not easily washed away by sweat. Paints, made with alcohol, compound tincture of benzoin, or chloroform, were much less satisfactory. Applications were made three times a day, or alternatively, dressings were secured in position and left for periods up to 96 hours. The total period of treatment was seven to 10 days. In ringworm of the foot, the forms of treatment preferred were (*a*) 2 to 4 per cent chrysarobin in Lassar's paste, or (*b*) salicylic acid 2 per cent and benzoic acid 4 per cent in spirit; results were less satisfactory with a foot powder containing 5 per cent methyl-*p*-hydroxybenzoate and 5 per cent salicylic acid in talc.

For bullous impetigo, the most effective treatment was penicillin cream (500 units per Gm.) applied three times a day for five days.

Chloramphenicol in Meningitis Therapy

Although the mortality from miningitis has fallen remarkably during the past decade, the report of G. W. Prather and M. H. D. Smith (*J.A.M.A.* 143:1405, 1950) indicates that the record can be improved even further through the use of chloramphenicol (Chloromycetin). In their studies, 15 consecutive patients, eight of them under one year of age, had meningitis bacteriologically proved to be due to Hemophilus influenzae type B and were treated with chloramphenicol; all recovered. In every case spinal fluid was sterile on the second lumbar puncture, performed within an average interval of twenty-one hours. No toxic effects attributable to the drug were observed. Although an optimal dosage regimen has yet to be worked out, a good starting point suggested by these observations would be 50 to 100 mg. per kilogram of body weight by mouth or by stomach tube on admission, followed by 250 mg. every eight hours thereafter for five or more days, regardless of weight.

They, therefore, believe this method of treating meningitis due to H. influenzae type B to be more satisfactory than any other they have had an opportunity to use.

Combining Antihistaminics

In the *Annals of Allergy* (8:350, 1950) T. F. Hubbard and A. J. Berger state that Thephorin has been shown to differ from the other known antihistaminic compounds in its side effects on humans. In contrast to the other antihistaminics, which most commonly produce depression and somnolence, Thephorin has as its most common side reactions stimulation and insomnia. It seemed possible to combine this drug with one of the other antihistaminics, providing an antagonistic or nullifying effect on the side reactions and securing an additive antihistaminic effect. To test this view, clinical tests were made and data are presented on the administration of Thephorin, Trimeton, and the two drugs in combination for a period of from one to three weeks each, to 200 patients with allergic vasomotor rhinitis due to ragweed.

The incidence and degree of symptomatic relief was significantly greater with the combined drugs than with either of the drugs administered separately. The incidence of side reactions with the combined drugs was the same as that observed with Thephorin, but greater than that observed with Trimeton, although the number of severe reactions observed with the combination was no greater than observed with Trimeton, and significantly less than observed with Thephorin. Of the patients, 37.5 per cent preferred the combination, 30 per cent preferred Trimeton, 25 per cent preferred Thephorin, and 7.5 per cent found them all of about equal usefulness. It is concluded that there was a definite, though incomplete, antagonism in the side reactions of the two drugs.

Peroral Insulin Therapy

Experiments by F. Lasch (*Wienklin Wochuschr.* 62:170, 1950, through *J.A.M.A.* 144:502, 1950) on animals and therapeutic trials in humans revealed that the ultrafiltrated portion of the commercial insulin, administered by mouth, permeates the intestinal wall of animals and men and causes lowering of the blood sugar level. This effect may be obtained without administration of substances which favor absorption. Rapid absorption of the ultrafiltrates of the insulins resulted from intraduodenal administration in the absence of antifermentative substances. Administration of antifermentative substances, such as the organic dyes trypan red and malachite green, is required in addition to oral administration of ultrafiltrates of insulin in order to obtain the same effect on the blood sugar level. These dyes prevent the inactivation of the insulin by pepsin and trypsin. Lasch extracted crude insulin from the pancreas of cattle. By using these unpurified crude insulin preparations for ultrafiltration he was able to obtain a considerably increased ultrafiltrate portion with the described effect on the blood sugar level. The employment of these ultrafiltrates seems to offer good prospects for therapeutic trials.

PERFUMER'S SHELF

Oil of Lippia Carviodora from Kenya

In their report in the new publication, *Colonial Plant and Animal Products* (1:56, 1950), D. J. Cosgrove, H. T. Islip and F. Major state that in 1944 the Imperial Institute (in London) received from Nakuru, Kenya, a sample of oil from a plant growing near the northern frontier of that colony. Upon careful examination, it was decided that the plant from which the oil was obtained is a new species of *Lippia*, namely *L. carviodora Meikle*. A further sample of the oil was received from the same source in 1945.

Sample A (received in 1944) had been obtained by the steam distillation of a mixture consisting of flower-heads and leaves and twigs. The yield was 1.02 per cent. The oil was clear and pale yellowish-brown, the odor recalling that of caraway or dill. Sample B (received in 1945) had been obtained by steam distilling dried leaves only, the yield being 0.99 per cent. The oil was pale yellow with an odor similar to that of the earlier sample. Detailed examination of the two oil samples showed the following characteristics:

	Sample A	Sample B
Specific Gravity, 15.5° C./15.5° C..	0.9303	0.9211
Optical Rotation $\alpha_{D}20°C.$	+66.34°	+73.00°
Refractive Index $n_{D}20°C.$	1.4909	1.4890
Acid Value, mg. KOH/g. oil	0.7	0.93
Aldehydes and/or ketones (normal sulphite method), per cent. v/v	64.0	57.3
Aldehydes and/or ketones, as carvone (hydroxylamine method), per cent, w/w.	67.9	60.2
Solubility at 15.5°C. in 70 per cent. v/v alcohol	Insoluble in 10 vols.	Insoluble in 10 vols.
Solubility at 15.5°C. in 75 per cent. v/v alcohol	—	—
Solubility at 15.5° C. in 80 per cent. v/v alcohol	Soluble in 1 vol. and more	Soluble in 2 vols. and more

Further chemical examination indicates that the probable composition of *Lippia carviodora* oils are as follows:

	Sample A per cent. w/w	Sample B per cent. w/w
Ketones, mainly or entirely *d*-carvone	67.9	60.2
Free alcohols, probably mainly linalol	2.4	3.5
Acids, as acetic	0.1	0.1
Esters, probably mainly linalyl, as acetate	1.3	4.1
Terpenes (mainly *d*-limonene) and sesquiterpenes	28.3	32.1

Commercial opinion on the oil indicates that it has definite promise, both on its own account for perfumery and flavoring, and as a source of carvone. If available in quantity it seems likely that the oil should find a market. Attempts are being made to cultivate the plant.

Analytic Factor for Essential Oils

An investigation by C. J. Lintner, J. V. Swintosky, D. Zuck and T. Higuchi (*J. A. Ph. A.*, Scient Ed. 39:415, 1950) was undertaken with the supposition that a new useful quantitative index may be obtainable for volatile oils and related substances by application of the new quantitative electrometric titration method employing lithium aluminum hydride. The purpose of the initial study was to establish the feasibility of this type of analysis for volatile oils. The application of the lithium aluminum hydride electrometric titration procedure (HLS method) to the quantitative determination of various functional groups has been described previously, and allusion had already been made to the possibility of using this procedure in the analysis of volatile oils. It was observed, in the limited amount of data resulting from the use of the HLS method, that alcohols, phenols, aldehydes, ketones, esters, and carboxylic acids, compounds which are present in essential oils, react quantitatively with lithium aluminum hydride.

It is common knowledge, say Lintner and his associates, that volatile oils consist of mixtures of these types of compounds together with other types which do not react with lithium aluminum hydride. Volatile oils then should undergo reaction with this agent; and if different lots of a given volatile oil are qualitatively and quantitatively similar then a lithium aluminum hydride equivalence of rather constant value for individual oils should be establishable.

Using the apparatus and reagent described in *Analytical Chemistry* (22: 534, 1950) an electrometric titration was made of 11 common essential oils and 14 essential oil isolates. Study of the data on the essential oil isolates show that for each substance titrated, experimental and theoretical values check reasonably well. The results of the analyses on the volatile oils indicate the reproducibility of the HLS method, and the possibilities for this procedure in establishing a lithium aluminum hydride equivalence as a quantitative index for purity and identity of these products. The data for all of the oils correlate well with present knowledge of the qualitative and quantitative chemical composition of these products. The HLS method thus provides a simple, readily reproducible procedure for a rapid determination of a chemical index which should be a useful tool in the analysis and identification of volatile oils.

Oil from Leaves of Beal Fruit Tree

K. K. Baslas and S. S. Deshapande (*J. Indian Chem. Soc.* 26:231, 1949) report that steam distillation of the leaves of the beal fruit tree (*Aegle marmelos*) gave an essential oil in a 0.6 per cent yield. The oil, which had a citral content of 3.76 per cent, displayed the following characteristics:

Specific gravity	**0.8476**
Index of refraction	**1.4750**
Specific rotation	**52.1°**
Acid value	**2.9**
Saponification value	**16.1**

Fractional distillation of the oil gave three fractions. The first fraction, extracted with 50 per cent aqueous resorcinol, left *alpha-d*-phellandrene and nitrosite. The aqueous resorcinol solution with alkali gave cineole which formed a semisolid mass with phosphoric acid and yielded a characteristic yellowish green crystalline addition compound with iodol (tetraiodophyrrole).

The second fraction, treated with cold saturated sodium sulfite solution and then an equivalent amount of acetic acid gave the bisulfite addition compound of citronellal; a semi-carbazone, crystallized from alcohol, was also obtained. The third fraction also gave a bisulfite addition compound and a semicarbazone; it consisted of citral. The second and third fractions both gave the usual aldehyde reactions.

Bulgarian Rose Oil

Science, says Y. Bekar in the *Perfumery and Essential Oil Record* (41:248, 1950) knows of 7,000 varieties of rose, but only a small number of these are oil-producing. Roses which yield the largest percentage of oil are those which grow in Bulgaria's "Rose Valley," namely the red Kazanlik Rose (*Rosa damascena*, Miller) and the white rose (*Rosa alba*). The white rose gives 40 per cent more blossom than the red variety, but the latter is much more aromatic and in distillation provides less stearoptene (non-aromatic substance) and much more elaeoptene (aromatic substance) than the white rose. The quality of the oil produced form the red rose is nearly twice as high as that produced from the white rose; the ratio being five to three. The oil-producing roses which grow in the Rose Valley are used predominantly for producing the world-famous Bulgarian rose oil—the "molten gold of Bulgaria," and forms the basis of the most expensive and exquisite perfumes. Nearly 2,000,000 roses (or 3,000 to 4,000 kilograms) are necessary to produce one kilo. of rose oil, or just over 2 pounds; 2,000 roses producing one gram. of pure aromatic rose oil.

Formerly, says Behar, Bulgarian rose oil was frequently adulterated, usually by the addition of geranium. This has been eliminated, he claims, since the production of the oil became a state monopoly under the name Bulgarska-rosa. The following table of rose oil characteristics comes from the laboratories of this organization and respresents the results of the examination of a large number of samples of oils of different distillations:

Specific gravity at 30° C.	**.8605 to .8485**
Refractive index at 25° C.	**1.4530 to 1.4640**
Polarization in 100 mm. tube	**—2.3° to—4.4°**
Freezing point	**16.5° C. to 22.5° C.**
Acid number	**0.92 to 3.75**
Ester number	**7. 2 to 17.2**
Saponification number	**8.0 to 20.75**
Acetylation number	**197.87 to 233.33**
Free alcohols	**62.90% to 75.50%**
Combined alcohols	**2.0% to 4.7%**
Total alcohols	**65.8% to 78.2%**
Stearoptene	**18.2% to 21.3%**
Citronellol	**30.5% to 58.6%**

Behar calls attention to the fact that for centuries roses have been also used in the kitchen, by way of the excellent jams, jellies and syrups exported from Bulgaria. Rose jam aids the digestion and has certain curative properties. In fact, the records tell that roses were used in medicine in the days of Hippocrates, 400 B.C. In Bulgaria, medical research is now in progress to ascertain whether rose oil has anti-tubercular properties. Other experiments are being made for producing vitamin C from white roses.

Essential Oil of Hemlock

At the 118th meeting of the American Chemical Society, held in Chicago in September, 1950, A.C. Shaw reported that foliage from hemlock (*Tsuga canadensis*) was distilled with steam to give a 0.249 per cent yield of essential oil. Eleven constituents, totaling 90.6 per cent of the original oil, were separated by fractional distillation, and tricyclene, *d*-α-pinene, *l*-camphene, and *l*-β-pinene, myrcene, *d*-α-phellandrene, *l*-limonene, *l*-thujone, and *l*-bornyl acetate were identified. An unidentified tertiary alcohol and a new sesquiterpene related to *l*-cadinene were also isolated. The percentage composition of the oil was given.

Butane Extraction in the Perfume Industry

According to E. R. Meunier (*Soap, Perf. & Cosmetics* 23:827, 1950, also *Ind. parfum* 5:26, 1950) the enfleurage process of perfume extraction is giving way to the process of extraction with volatile solvents. For example, during the floral season of 1949, at least three-quarters of the jasmin crop at Grasse was treated with petroleum ether or with benzene. This solvent extraction technique provides highly concentrated products and requires less labor. In addition, in contrast to the enfleurage process, it is not necessary to wait until the end of the crop in order to obtain completely finished products.

During recent years, however, studies have been made to further improve the quality of the products. High vacuum distillation was tried, but proved costly. A new approach was made through the employment of solvents other than petroleum ether or benzene. A solution was offered in the use of butane which permits solvent extraction at a temperature lower than that required with other solvents. With butane, fresh flowers extracted at about 20°C. gave products superior to those obtained by means of higher-boiling solvents. It was found that the lower the temperature and the shorter the duration of the extraction, the better is the quality of the extract.

Prevention of Flavor Deterioration

Deterioration in flavors, says E. Bemfield (*Perf. & Essent. Oil Rec.* 41:209, 1950) may be due to the action of one or more of the following factors: heat, light, water, air, metals and ferments and molds, considering each factor in turn, he states that the first essential for the storage of essences should be a cool place. In this connection it may be mentioned that sometimes owing to the high concentration of the flavoring matter in the solvent some essences tend to cloud in the cold. This, however, is soon adjusted if the bottle is removed to room temperature and well shaken.

All essences and oils should be kept away from the light and in dark bottles. The actinic rays of light exert a chemical action on essences and oils, causing them to first darken and then resinify. Any colored bottle will serve the purpose, and some of the most popular are green and brown.

Water exerts a harmful action on essences and essential oils. If an essence is placed in a wet bottle the water lowers the solvent capacity of the alcohol or other solvent used and the essence throws out some oil from solution. In the case of an oil the water gradually decomposes it, especially with ester-containing oils such as lavender and bergamot. If an oil is cloudy or wet it should be carefully dried over freshly fused anhydrous sodium sulphate and then filtered.

The oxygen present in the air above a half-filled bottle causes the terpenes to resinify. Bemfield believes that if the full contents of a bottle of an oil or essence is not used at once, the remainder should be transferred to a smaller bottle.

Metals exert a bad effect on essences and essential oils. Glass is the ideal container for storing essences and essential oils, and if any arrive from the manufacturers stored in metal they should be immediately transferred to glass. The metal reacts with the slightest trace of acid or water in the oil or essence; causing discoloration and loss of flavor characteristics. Aluminum probably exerts the least deleterious action of any of the metals, but it is not without its defects.

Loss of flavor by fermentation is often encountered with fruit juices. With such products, cleanliness is absolutely essential. The rise of preservatives, heat sterilization and adjustment in pH are among the elements considered useful in connection with spoilage by fermentation and molds.

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ABREAST OF THE MARKETS

ESSENTIAL OILS, BOTANICALS QUIETER; PRICES CONTINUE UPWARD BECAUSE OF SMALL LABOR SUPPLY; COD LIVER OIL 20c HIGHER

The large-scale buying of raw materials which took place during July and August and was initiated by the Korean uprising has largely subsided. Having bought so far ahead during these earlier months, consumers are now in a position to draw on their warehouse supplies. At the present time it looks as if buying in the botanical and essential oil fields will be slower than usual in the coming months, provided the Indo-China theatre of operations does not develop into brazen warfare demanding UN action.

While such a diminishing demand for commodities normally produces an over-all decrease in prices, according to the law of supply and demand, signs are developing, however, which indicate that prices will continue to mount in certain items. This contrary trend is due chiefly to the exceedingly small labor supply in existence today throughout the entire world. In the United States, for example, workers have been drawn away from the harvesting of cascara bark and peppermint to more remunerative jobs in the lumber industry, on the West Coast, and to the automobile industry in Michigan where peppermint is collected.

The essential oils of birch, wintergreen, sassafrass, wormseed, wormwood, cedarwood, and cedarleaf are in similar straits because of the lack of manpower. In the Southern states, both the oils and botanicals are faced with the strong competition of cotton and textile industries which are hiring men at higher wages. The one exception seems to be that of dillweed which this year yielded a large enough supply to carry through 1951.

In South America the supply of both balsam copaiba and balsam tolu has already diminished because collectors have turned to more prosperous work, chiefly in the rubber plantations. One report has it that a laborer can collect twice as much rubber in a given time as balsam copaiba, thereby earning twice as much money.

Scarcities are developing in Lycopodium, from Poland, and Bulgarian Rose oil, according to one source, because during the past few months stevedores have refused to unload ships whose cargo included material originating in countries under Russian domination. Other spokesmen have discounted this fact, stating these commodities would make up such a small percentage of a shipload that they would be overlooked.

Another factor which may very well affect the supply to this country of Eastern European essential oils and botanicals is the uncooperative attitude of the governments behind the Iron Curtain. Because of troublesome restrictions and red tape imposed by the puppet Communist regimes on any type of trade with the West, some shipments have been delayed for months, others have contained inferior material which had to be confiscated on arrival in the United States, and still others have just not arrived. The shippers in several cases have adopted the attitude that it is too expensive to send a cable advising "no shipment," when the American importer will learn any way that the material has not been shipped, that is, if he waits long enough.

The point of view prevalent in Eastern Europe seems to be that a man is much more important to the government if he is working in a military capacity than if he is gathering botanicals. And so the export of botanicals is discouraged. One source has reported that some eastern European botanical exporters, with whom business had been successfully transacted for ten or more consecutive years prior to World War II have suddenly become either disinterested or uncooperative. The chances are they are obeying orders issued by headquarters.

Western Europe, on the other hand, seems to be getting back on its feet now, and, while some trade difficulties do exist, the problems are nowhere as great as those on the other side of the continent.

In the Far East, now the powder keg of the world, the incipient trouble in Indo-China, the threat hanging over Formosa, the internal struggles of India, the strife in the East Indies, and the lack of cooperation coming out of Communist China have all had an adverse effect on international trade.

As far as the war materials are concerned, quicksilver, glycerine, and alcohol are very firm, with reports that the industry is imposing its own controls on sales, as far as possible.

Geranium Oil Very Short

No price change occurred last month in the lower limit of geranium oil, although the upper range of the Algerian oil was increased $2 and now extends from $26 to $30. The range of the Bourbon oil was increased by $1 and extends from $34 to $36. According to several spokesmen, these prices were virtually nominal, since the material was so scarce. In some circles the scarcity is attributed to speculators who have indulged in heavy buying so as to be in a favorable position should the international situation become worse.

The concensus now is, however, that with the easing of the international emergency, some of the material being held back will be released to the market.

Cod Liver Oil Upped 20c

The price of cod liver oil has been advanced 20c a gallon to $1.75 in the past month, and up to the present time, the 30-gallon drums are being quoted at $50. This increase has been brought about by a number of local developments, including a long strike among the trawlers in Iceland. Already three months long, this strike has temporarily halted production of the oil, while the island's stocks have dwindled to an insignificant amount.

When the outbreak of hostilities in Korea occurred, the western European

(Continued on page 698)

• **Prices quoted in this section were current on the first of this month.**

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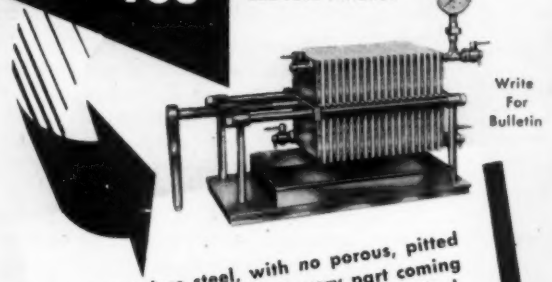

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QUICKSILVER ADVANCES $3, OUTPUT REMAINS LOW, DEMAND INCREASES; ALCOHOL SHORT, PRODUCERS ALLOCATE STOCKS

In the early months of 1950 consumers were buying quicksilver in small quantities, rather than maintaining large stocks in the face of a possible price reduction. When the United States was suddenly shocked out of its complacent lethargy in June by the forces of Communism, consumers overnight increased their demands for the metal.

At the same time, production of the metal remained on a constant low level, causing a hectic atmosphere. Mines in Spain could not be worked during the summer months owing to the formation of sulfur fumes which rendered the area uninhabitable. In Italy, too, production remained low, Italian authorities feeling it would be folly to open the numerous mines in the country areas, just for an emergency period which might be short-lived. As explained by one spokesman, the Italian government refused to open these marginal mines, because such a move would mean hiring men away from other jobs and setting up work for a large number of men who would be employed in the mines only as long as the emergency lasted. They would then be fired, and listed among the unemployed workers.

Disregarding the international situation, the Italian government preferred to maintain the larger mines at a steady rate of output. At the same time Italian dealers restricted their mercury exports by diverting a large portion of the production to their own stockpile. In this way the dealers reasoned, they would be in a safe position by 1951 when they will be able to fill all commitments.

As for the United States mines, this government plans to keep all of them closed tight for the present. The attitude of government officials here is that quicksilver in the ground is always available, while it is advisable to import as much of the metal as possible from Spain and Italy now that it is accessible. If these territories, on the other hand, are at some future date controlled by a government hostile to the United States, they would cease to exist as a source of the metal—and we could fall back on our own storehouse of unmined material.

The price of the metal in October advanced by $3 a flask and is now quoted in the range from $90 to $95.

Alcohol Tight, Deliveries Slow

The acute alcohol shortage is best represented by the action last month of the National Security Resources Board which asked the country's distillers to convert about 15 percent of their production facilities to the manufacture of industrial alcohol. The distillers were asked to produce 10,000,000 gallons of industrial alcohol by the end of January and to make the first delivery amounting to 2,500,000 gallons by the twentieth of this month.

The domestic market in alcohol last month was taxed with a demand far heavier than its supply, and producers were forced to allocate what material they had on a basis of previous sales. Deliveries were slow, and the outlook was not very good.

The Alcohol Tax Unit, Bureau of Internal Revenue, Treasury Department, last month released the following data on the supply, production, withdrawals, and stocks of ethyl, completely denatured and specially denatured alcohol during the month of August, 1950, in comparison with August, 1949:—

Production

	Proof gallons	
	1950	1949
Ethyl	33,097,626	26,659,751
*Completely denatured	217,631	705,218
*Specially denatured	17,515,690	11,608,353

Withdrawals

	Wine gallons	
	1950	1949
†Ethyl, tax paid	6,928,034	3,587,401
tax free	28,123,893	25,440,989
*Completely denatured	232,936	571,429
*Specially denatured	16,886,612	11,878,872

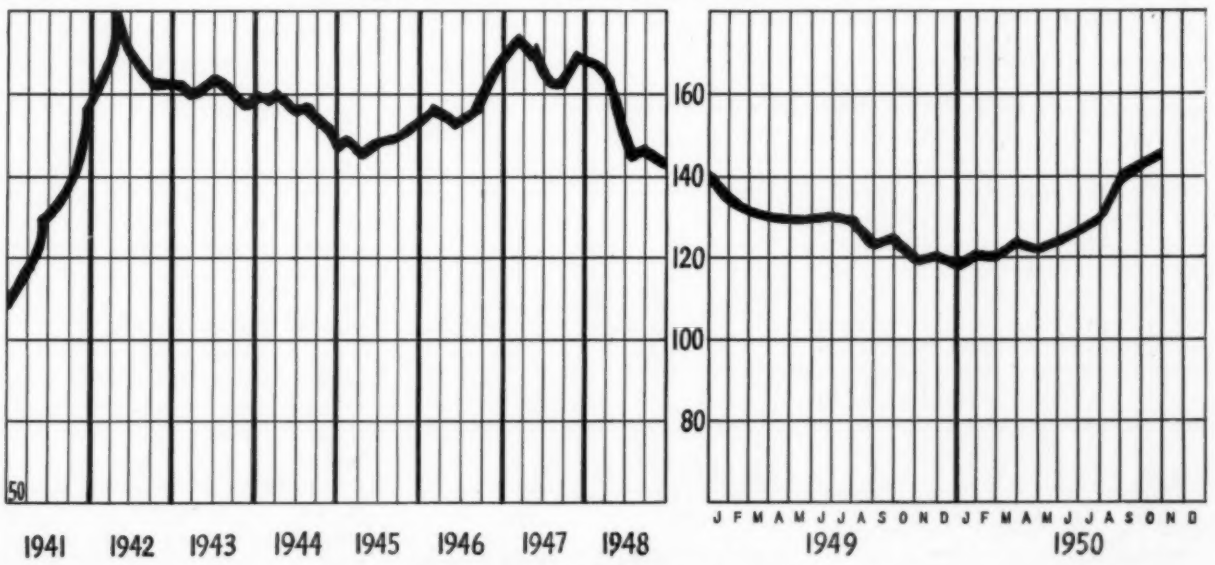
Stocks

	Gallons	
	1950	1949
†Ethyl	24,579,854	56,574,533
*Completely denatured	51,487	243,591
*Specially denatured	3,147,593	7,882,365

†Wine gallons. *Proof gallon.

There is a potential source of alcohol in Ecuador which has not been tapped because of high operational costs. Alcohol was made during the first half of this year in the old plant at Babahoyo, and this product was not fit for export, while the modern plant Buran remained closed.

50 Raw Materials—Weighted Price Index. 1926 = 100.



The price index of fifty commodities for October advanced from 143.5 to 146.8.

OCTOBER PRICE CHANGES

UP

Almond Meal 8c
Anise Oil USP 5c
Arabic Gum, Sorts, Amber 1c
White, No. 1 3c
Arrowroot 2c
Balsam Copaiba Para 7c
Balsam Tolu 25c
Bois de Rose, Brazilian 10c
Caraway Oil 25c
Carnauba Wax, North Country No. 3 1c
Cascara Sagrada 4c
Cedar Leaf Oil 50c
Citronella Oil, Ceylon 20c
Clove Oil, 5c
Cod Liver Oil 20c
Coriander oil $5
Cumin Seed, Morocco 4c
Dandelion Root 8c
Elder Flowers 5c
Eucalyptus Oil 5c
Ginger Oil $1.50
Golden Seal Root 15c
Grape Fruit Oil 10c
Helonias Root 10c
Iodine, Crude 18c
Iodine, Resublimed 25c
Ipecac Root 50c
Lanolin 1c
Lycopodium 15c
Mace oil, Dist. 10c
Manna, Large 25c
Mercury $3
Nutmeg Oil 10c
Orris Oil, Concrete 35c
Patchouli Oil $2.75
Pennyroyal Oil 40c
Petit Grain Oil S. A. 75c
Pine Needle Oil 30c
Potassium Iodide 20c
Saffron Valencia $2
Senega Root 40c
Sodium Iodide 22c
Wormseed Oil $1
Ylang Ylang Oil, Bourbon $4.25

DOWN

Camphor Oil Sassafrassy 10c
Carnauba Wax No. 1 4c
Menthol $2
Ouricury Wax 9c
Vanilla Beans, Bourbon 25c

Another possible source appeared in Jamaica, where, it was reported, the Jamaica Sugar Manufacturer's Association requested the government for approval to manufacture alcohol from surplus molasses. It is estimated that in 1951 1,000,000 imperial gallons of anhydrous alcohol could be produced.

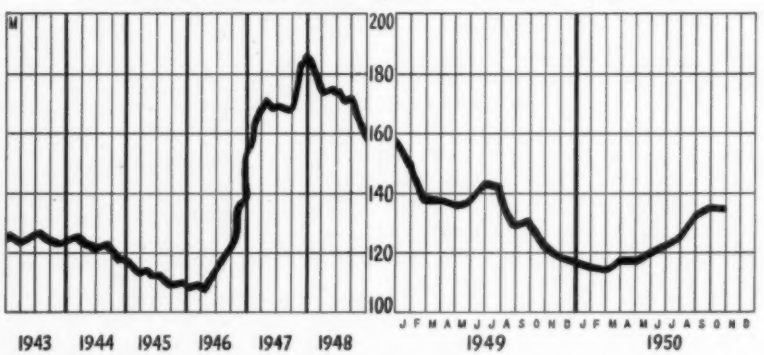
Cod Liver Oil Upped 20c

(*Continued from page 695*)

countries were frightened into an impulsive rush of cod liver oil buying from Norway. The Continental countries grabbed all the oil they could find. At the same time, England, in dire need of cod liver oil for her Empire, purchased what oil there was left. The result is only now being felt, especially in the United States.

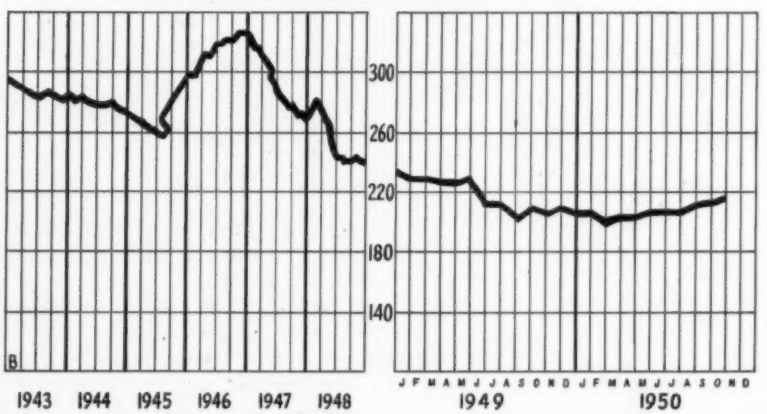
Because of the heavy expenditures which America is carrying to support UN action in the East, as well as the rehabilitation programs in Europe, the international value of the dollar has decreased. In order to allow for this dollar depreciation, therefore, Norwegian shippers have been selling their cod liver oil to Great Britain and the Continent in return for Sterling currency. This recent price increase of 20c is said to make up the loss from the devalued dollar, so that, as far as cod liver oil is concerned, Norwegian shippers from now on will receive the same number of Kroner for the commodity, whether it is sold in the Sterling area or in the dollar area.

15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.



The medicinal chemicals index declined slightly from 135.8 to 135.2. Cod liver oil, iodine, and mercury went up; menthol went down.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index advanced from 211.2 to 217.2. Balsam tolu, cascara sagrada, and ipecac root went up.

Glycerine Demands Increasing

Glycerine remained steady pricewise last month at about 45c a pound, while the demand continued to mount. Producers reported that they had originally followed the custom of taking care of their regular customers first. It seems, however, that new customers appeared on the scene with the new "DO" classification of Defense Order, which took precedence over any ordinary order. The producers were then forced to satisfy these DO orders first and sell them whatever they requested.

By the end of the month it was evident that the DO orders were coming in steadily and at a more rapid frequency. It was also apparent that some of the regular customers were attempting to procure these DO ratings so they would be able to keep their plants open, otherwise they would be forced to close down, unable to secure the raw materials.

Iodine Advances

Crude iodine went up 18c last month from $1.52 to $1.70, while the resublimed material advanced 25c from $2.30 to $2.55.

Menthol Declines Sharply

The price of menthol fell $2 during October from $13 to $11, and was said to be caused in part by the rush buying of earlier months. Consumers have apparently bought all the menthol they are interested in acquiring for the present time, especially since the international emergency is easing somewhat. An additional factor in the declining quotation is that lower-priced

goods were beginning to arrive from China by the end of last month.

With the winter season approaching, however, when menthol sales usually are the heaviest, some sources anticipate a firmer trend in the market at the turn of the year.

Vanilla Beans More Favorable

During the latter part of October reports were received from the origin indicating a decline in export prices of vanilla beans. This information in turn resulted in a 25c fall in the Bourbon variety, from $4 to $3.75. Other sources continued to quote the higher price level of $4.25. In either case, it appeared that supplies were adequate for present needs.

Peppermint May Be Firmer

Although peppermint oil remained at the level between $6.50 and $7.50 in October, several sources indicated there may be an advance in the future. This is based on the information that the new peppermint crop which was collected late in the summer was low in menthol content. The belief is that the high-menthol oil will sell at a premium, and that replacement costs of the oil will be higher when the new oil enters the market.

Other sources dispute this explanation, attributing the possible price increase only to the lack of labor available to collect the plants.

Coriander Replacements Higher

Although material which has been in stock for some time is still being offered at $25, replacements in coriander oil are as high at $30 and even up to $32.50 per pound.

Nutmeg Oil Up 10c

The 10c advance of nutmeg oil from $3.75 to $3.85 was said to have followed the firming of the spice situation, especially in the case of the East Indian oil.

Essential Oils From Madagascar

Exports of essential oils from Madagascar during 1949, in metric quintals, were: lemon grass oil, 84; clove oil, 4,798; ylang ylang, 252; and 250 quintals of "other essential oils." (One metric quintal = 220.4 pounds).

Balsam Prices Advance

Balsam copaiba para and Balsam tolu both advanced last month, the former being quoted from 85c to $1, and the latter, from $3.75 to $4. The chief cause was lack of labor with which to collect the material.

Lemon Oil Scarce

Prices of California lemon oil continue to range between $4 and $4.25 per pound, according to producer. Because of the meagre supply available, dealers find it necessary to sell the oil in limited quantities in order to make it go further.

According to one report, Messina oil has been appearing on the market in quite small quantities and at high prices. Demand is very active, and much more could be sold, if it were available.

Patchouli Oil Up $2.75

Patchouli oil advanced to $26 a pound last month, and information was received that Penang prices on new shipments were higher. Stocks seemed to be sufficient to handle the demand.

No Orange Oil From Florida

Several essential oil houses reported last month that they had received no orange oil from Florida for the past few months and had received all their supplies from California. It is expected in many quarters that when the oil price rises sufficiently high the frozen juice producers in Florida will enter the market once again.

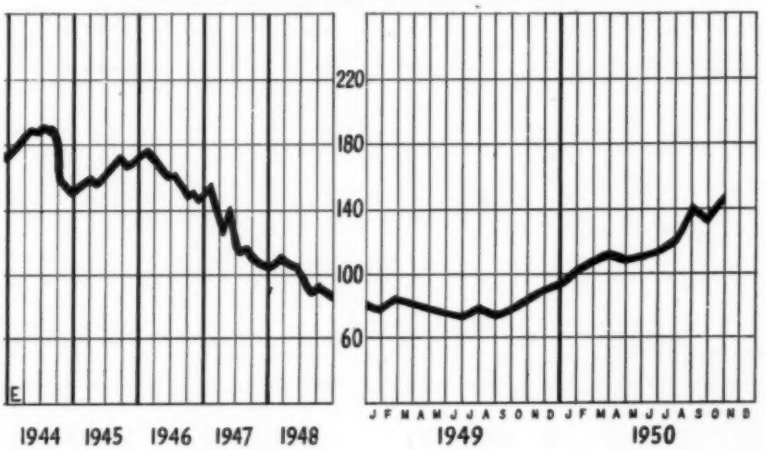
Citronella Oil Up 20c

Ceylon citronella advanced to $1.60 last month, and continued to be offered in good value. Occasional offers of Java oil have originated from Ceylon but at very high prices, and demand for Java-type oil has increased greatly.

According to the Department of Commerce, the Formosan government has placed a tentative floor price of $1.25 per pound, c.i.f. Japan, or $1.12, f.o.b. Keelung or Koahsiung for export of the Java type oil to the United States. The strong desire for dollars in Formosa has prevented that source from advancing prices further.

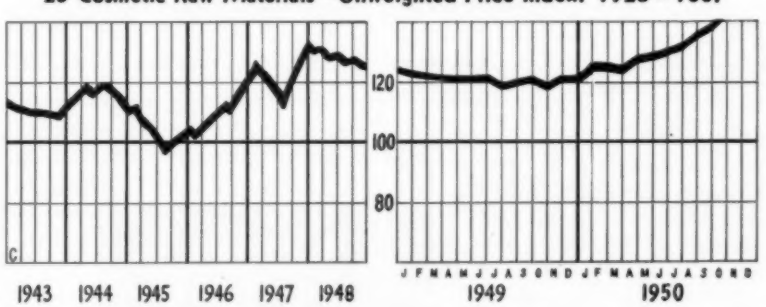
In the Hsinchu area of Formosa the expected production of the Java-type oil is about 2,626,000 pounds. It was also reported that the Land Bank of Taiwan had granted loans totalling about $48,780 to growers of citronella grass to be repaid in six months.

15 Essential Oils—Weighted Price Index. 1926 = 100.



The essential oils index jumped up from 138.7 to 148.8. Anise, bois de rose, citronella, clove, and eucalyptus oils were higher.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.



The cosmetic raw materials index went up from 139.4 to 141.1. Almond meal, gum arabic, balsam copaiba, balsam tolu, and lanolin went up; menthol went down.

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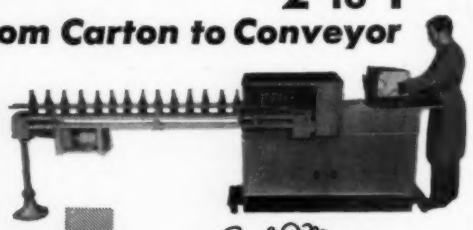

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INDUSTRY'S BOOKS

Pharmaceutical Emulsions and Emulsifying Agents, by Lawrence M. Spalton, B. Pharm. (London), M.P.S., 132 pp., Chemical Publishing Co., Brooklyn, $3.75.

This book deals with the practical aspects of emulsions used for pharmaceutical purposes. The theory of emulsification and the structure of emulsions in general are briefly described as an introduction. A chapter is devoted to the discussion of pharmaceutical emulsifying agents which are classified as anionic, cationic, and nonionic, and also according to their sources. The technique of emulsification, the apparatus used, and the possible causes of failure are discussed in detail. The advantages and drawbacks of the various emulsifying agent groups are pointed out for special applications and typical formulas are given for pharmaceutical products and cosmetics. The necessity and use of antioxidants and other preservatives are considered. The book includes a detailed alphabetical list of emulsifying agents and other chemicals used in the preparation of pharmaceutical emulsions.

Handbook of Bacteriology, by Joseph W. Bigger, M.D., Sc.D., Professor of Bacteriology and Preventive Medicine, University of Dublin, Sixth Ed., 547 pp., Illus., The Williams & Wilkins Co., Baltimore, $4.50.

The revision in preparation for this, the sixth edition, has been the most complete which the book has received since its publication almost twenty-five years ago. Two chapters have been added and eleven have been completely rewritten. Not one remains without considerable additions, deletions or alterations. When the last edition was published, the sulphonamides were new discoveries and penicillin, the first of the antibiotics, was of interest only to the bacteriologist. Now two chapters, one new and the other drastically revised, are required to deal with chemotherapy. Among chapters which have been rewritten are five on immunity, three on intestinal bacteria and one on undulant fever. The chapter on viruses and Rickettsiae is almost entirely new and is now in line with the advances made in the study of these minute organisms. The formulae of various solutions, stains and culture media have been relegated to the last chapter where they will be available for reference without suggesting that the student should attempt to memorize them. This text has increased in size from 455 (previous edition) to 535 pages.

The Condensed Chemical Dictionary, Francis M. Turner, Editorial Director, Fourth Ed., Completely Revised and Enlarged by Arthur and Elizabeth Rose, State College, Pa., 726 pp., Reinhold Publishing Corp., New York Thumb Indexed, $10.

The previous editions of this world-famous reference book have long supplied the personnel of the chemical and related industries with a short cut to a wealth of specific information about a vast number of commercial substances and chemical data. This new edition has been completely revised, brought up to date and enlarged, with the addition to the previous edition of 5,000 new items, making a total of over 23,000 items. The number of so-called chemical specialties (sold under trade or brand names) has been enormously expanded. Many of the new items have just been introduced. No other dictionary contains them. Included is data on the chemical and physical properties of chemicals and raw materials. The popular information on containers, shipping regulations and safety instructions has been continued and brought up-to-date. Many new items have been added in such fields as nuclear chemistry, chemotherapy, petrochemistry, etc. These new items cover products and processes which may, as yet, have no industrial applications but which are of scientific importance and frequently alluded to in the news. Many new cross references have been added to assist the reader in quickly locating the wanted information and to further clarify the confusion associated with chemicals and their synonyms. This book is designed for all those who, for any reason, need quick, accurate information on chemical terms and related information.

The Dynamic Economy, by Harold G. Moulton, with the collaboration of Frank Palmer, 238 pp., The Brookings Institution, Washington, $2.

This dialogue, written in the form of a play, tells the dramatic story of American industrial progress over the last century and sets forth the policy requirements for continued economic advancement. The scenes of the play are staged as New Year's Eve discussions, once a decade beginning in 1850. From decade to decade the participants, who represent the various groups in society, survey current economic developments, seeking to answer the age-old question, whether there can be progressive improvement in living standards for the masses. The discussions are thus concerned with fundamental economic issues which have been recurrent throughout our history. The result is a dramatic story of the forces which have overcome the limitations of nature and transformed the "static" state, which earlier writers foresaw, into a dynamic society.

Your Hair, Its Health, Beauty and Growth, by Herman Goodman, B.S., M.D., 287 pp., Emerson Books, Inc., New York, $2.95.

This book is for people with problems of hair retention, regrowth, removal, etc., whom Dr. Goodman found to be the victims of misinformation. It is now reissued to meet the demand for up-to-date knowledge, sound scientific advice, and authoritative and detailed instructions. It discusses almost every hair problem of men, women, and children, including daily care, bodily health and hair health, beautifying the hair, the barber's skill, the beautician's art, etc.

Pamphlets

The following phamphlets were recently issued by the American Management Association, 330 West 42nd St., New York and are available at prices indicated: Marketing Series Numbers 79—Stepping Up The Salesman's Effectiveness, 50c; No. 147—Management Action to Reduce the Cost of Selling, 50c; No. 185—Gearing Foremen and Workers to Production Efficiency, 50c; No. 186—Practical Uses of Break- Even and Budget Controls, 75c; No. 187—Wages, Employment and Personnel

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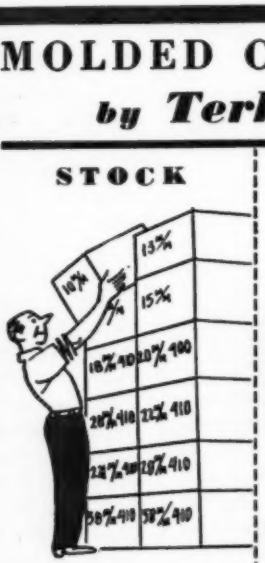

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Malignant Disease and Its Treatment by Radium, by Sir Stanford Cade, K.B.E., C.B., Surgeon, Westminster Hospital, Volume III, Second Ed., 146 pp., Illus., The Williams and Wilkins Co., Baltimore, $12.50.

Volume III deals with the common neoplasms of the breast and thorax, the abdomen and pelvis, and the male and female external genitalia. In revising the material, attention has been paid to advances both in our knowledge of the clinical and pathological features of the disease and in the technique of the various methods of radiation. The natural history of tumors in various sites is considered in detail and is the base for the selection of the various forms of treatment. All the material has been carefully revised; the chapter on Intrathoracic Tumors by Mr. C. Price Thomas has been largely rewritten; Dr. M. Lederman's collaboration in the chapters dealing with gynaecological cancer has brought this section up to date, with detailed attention to the various techniques of radiotherapy. Contents Volume III—Chapters XXI—Malignant Disease of the Breast; XXII—Intrathoracic Tumors; XXIII—Malignant Disease of the Esophagus and Stomach; XXIV—Malignant Disease of the Vagina, Female Urethra, Vulva, and Ovary; XXVI—Malignant Disease of the Bladder and Penis; XXVII—Malignant Disease of the Rectum and Anus.

Industrial Chemicals, by W. L. Faith, Director of Engineering, Chemical Division, Corn Products Refining Co., Donald B. Keyes, Vice-President, Heyden Chemical Corp., and Ronald L. Clark, Fellow, Multiple Fellowship of the Corn Products Refining Company Mellon Institute, 652 pp., John Wiley & Sons, Inc., New York, $8.

All of the 106 industrial chemicals treated in this book are made, at least in part, by synthetic or biochemical methods. Because of this method of selection the authors could include nearly every snythetic chemical of commercial importance. In addition, they added to the value of the book by presenting less significant chemicals which they feel are destined to increase in importance. Each chemical is dealt with in a separate section, and in each section the information is supplied in this order: current manufacturing processes . . . equations for the principal reactions involved . . . raw material requirements per unit weight of commercial product (in some cases, utility and labor requirements are shown) . . . production and price charts covering the past 20 years . . . a generalized use pattern . . . miscellaneous data . . . economic aspects . . . a map which points out the location of manufacturing facilities in the United States. The authors have done an exceptionally fine job of making this valuable information available within the confines of a single volume.

Unit Operations, by George Granger Brown, E. D. Campbell University Professor of Chemical Engineering and Chairman of the Department of Chemical and Metallurgical Engineering, University of Michigan, and the following associates of the University of Michigan: Alan Shivers Foust, Donald LaVerne Katz, Richard Schneidewind, Robert Roy White, William Platt Wood, George Martin Brown, Lloyd Earl Brownell, Joseph J. Martin, George Brymer Williams, Julius Thomas Banchero, Jesse Louis York, 611 pp., Illus., John Wiley & Sons, Inc., New York, $7.50.

Written by 12 authorities on the subject, Unit Operations is a comprehensive, integrated work covering the basic principles that are common to different operations. The operations are logically classified according to these common basic principles into four groups: Solids, Fluids, Separation by Ideal or Equilibrium Stages, Rates of Energy and Mass Transfer. This grouping permits using methods of general applicability and reduces the emphasis upon specialized procedures. The operations are treated in an ascending order of difficulty rather than upon any assumed relative importance. There are nine outstanding features of this work, namely, 1. Extra large page size (8½ by 11) and double-column format. This means that this book contains almost twice as much test material as the usual book. 2. Extra large charts that may be easily read for relatively accurate values. 3. Extra large illustrations (nearly one per page) that show details clearly. 4. Logical presentation of the material, developed from fundamental principles. 5. Numerous practical examples that illustrate the application of principles. 6. Complete derivation of theoretical equations. 7. Complete descriptions of important equipment. 8. Modern treatment, including unpublished material not previously available. 9. Consistent nomenclature to integrate the different operations.

Physical Attraction and Your Hormones, A Modern Guide to Beauty, Vitality, and Health, by Nina Katherine Lunn, with a foreword by Morris Fishbein, M.D., 304 pp., Doubleday & Company, Inc., New York, $2.95.

Writing from both personal experience and from sound scientific research, Nina Lunn discusses the startling and useful discoveries of medical science in recent years concerning the hormones and their extensive influence on the life of women. Treating the subject in a thoroughly practical manner, Mrs. Lunn tells you what hormone treatments can do in easing the shock of the climacteric, preserving youthful attraction, preventing and remedying the ailments peculiar to women, assuring successful childbirth, and many other problems of vital interest. She also clears up much of the confusion and misinformation about hormones. This is the first book which explains simply and completely the nature and functions of the hormones in the body and what can be done when the body fails to produce them in sufficient quantity. Physical Attraction and Your Hormones is indispensable to the modern, intelligent woman who realizes that beauty is more than skin deep and that attractiveness is vitally concerned with general health, body vitality, personality, and fertility.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association, 227 pp., J. B. Lippincott Co., Phila., $2.

The Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association contains reports of the Council adopted and authorized for publication during 1949. It includes reports of the Council previously published in The Journal, and editorial comments which accompanied them. In addition, the volume contains reports of the Council which, because of their lesser importance, were not published in The Journal, but are included here as a matter of record. The present volume supplements other Council publications including New and Non-official Remedies, Useful Drugs, Epitome of the U. S. P. and N. F., and Glandular Physiology and Therapy.

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Patent Thoughts and Trends

(Continued from page 679)

U. S. 1,702,227—issued Feb. 12, 1929 to Julius Culmann and Edgar Ahrens, assigned to G. Siegel Corporation of America, Inc.

Here are disclosed non-poisonous red coloring matters for cosmetic purposes, said coloring matters comprising the aluminum lake of a red dyestuff, said lake being the precipitate of a water soluble halogen-derivative of fluorescein with a soluble aluminum salt in the presence of benzoate of soda.

U. S. 1,779,891—issued Oct. 28, 1930 to Jacques Risler, assigned to Risler Corporation.

A skin cream for preventing sunburn is made from 100 parts by weight of phosphorescent zinc sulfide and 1000 parts by weight of a cream base made by heating and mixing together in substantially the proportions indicated, 170 g. stearic acid, 210 g. glycerine, 569 g. distilled water and 50 g. ammonia water containing 10 percent by weight of NH_3 and adding to the mixture when cold 1 g. of violet essence.

U. S. 1,818,699—issued Aug. 11, 1931 to Henry G. Dusenbury and Samuel Isermann.

In order to avoid the disadvantages of lead compounds in cosmetics the use of a titanium salt of stearic acid is suggested.

U. S. 1,877,952—issued Sept. 20, 1932 to Lydia O'Leary.

In order to conceal skin blemishes such as birthmarks a composition is suggested comprising zinc in impalpable powder form, glycerine and water, in approximately the proportions of 2041 grams of the zinc powder, 300 cubic centimeter of the glycerine and 720 cubic centimeters of the water, the said composition constituting a thick opaque liquid adapted for application with a brush, providing a yielding non-cracking coating that adheres to the blemish, simulating the normal skin and concealing by its opaque character the underlying discoloration.

This completes consideration of the expired U. S. patents. A later installment will take up the unexpired patents in this field.

RECENT PATENTS

2,511,319—**National Drug Phosphorylated desoxy-pyridoxine. Decarboxylation Inhibitor.**

2,511,390—**Merck—Penicilloic Acid-G.**

2,511,835—**Sterling Drug—Alkyl-aminoalkylmercapto-alkyl Esters of Benzilic Acid.**

2,511,838—**Ortho Pharmaceutical—Therapeutic Fungicidal Composition Containing Gentian Violet.**

2,512,102—**Ciba—Condensation Product of Sulfathiazole and Formaldehyde.**

2,512,192—**Am. Cyanamid—Silicone Resin Medicament Coating.**

2,512,512—**Merck—Imidazolidones.**

2,512,518—**G. D. Searle—Halogenated Acenaphthoyl Alkanoic Acids.**

2,512,572—**Am. Cyanamid—Pteridines.**

2,512,604—**R.C.A.—Concentrating effervescing pharmaceutical liquids.**

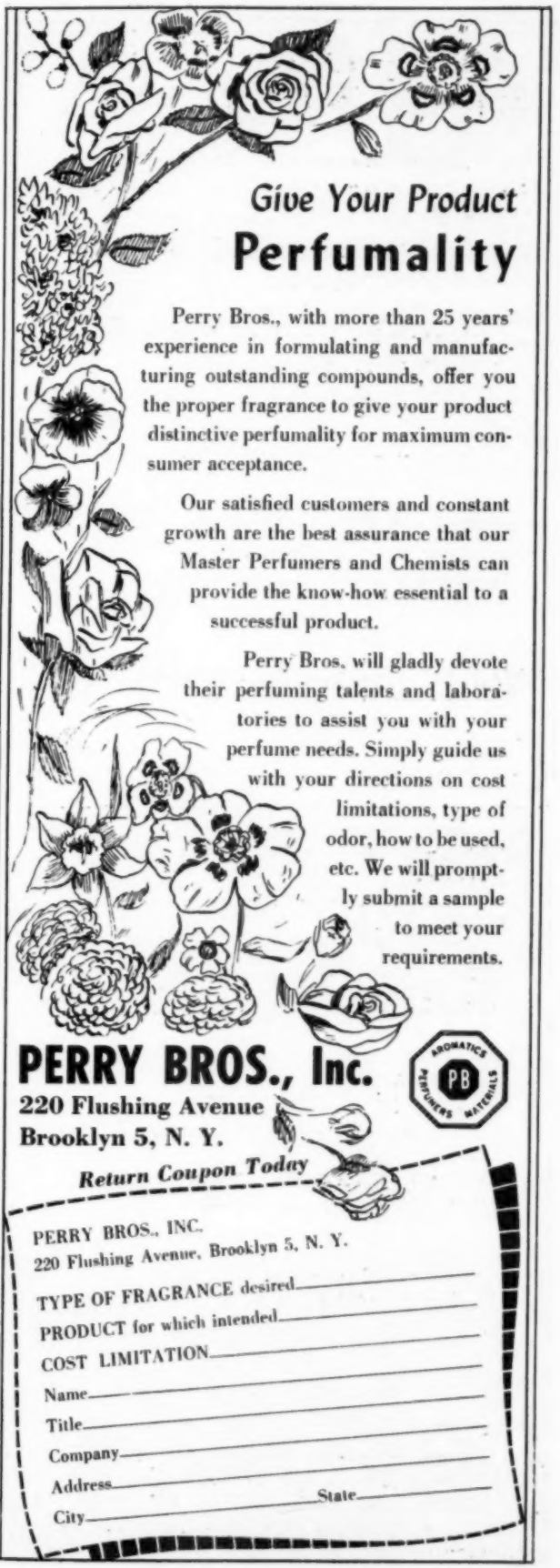
2,512,616—**Johnson & Johnson— Hemostatic Alginic Surgical Dressings containing Calcium Alginate.**

2,512,732—**Hoffmann-LaRoche—Carbamic Acid Esters of (3-Hydroxy-2-Pyridylmethyl) Amines.**

2,512,898—**Am. Cyanamid—N'-Butyrylsulfanilamides.**

2,513,173—**Glaxo Labs—4, 4-Diphenyl-6-Morpholino-Heptanone-3.**

2,513,270—Univ. of Michigan Regents—2-Iminopiperidines.
2,513,273—G. D. Searle—Acenaphthoyl alkan Oic Acids.
2,513,327—R. R. Ichelson—Treponema Palliddum Culture.
2,513,346—Parke, Davis—Organic Amino Diols Process.
2,513,351—U. S. A.—Gluten Phosphate Process.
2,513,487—Ciba—1-(Aminoalkyl)-1, 2, 3, 4-Tetrahydro Fluoranthenes.
2,514,325—W. R. Warner & Co.—4, 6-Alpha-Pyrone Derivatives.
2,514,376-7—Parke, Davis—Nitrophenylpropyl-amino-diols.
2,514,380—Hoffmann-LaRoche—Diamines.
2,514,528—Wahl Clipper Corp.—Hair Drier.
2,515,239, 2,515,240, 2,515,241—Parke, Davis—Alpha-Acylamido-Beta-Hydroxy Nitro Substituted Propiophenones, Nitrophenyl Ketonic Amino Alcohols, and Nitrophenyl Acylamino Acyloxy Ketones.
2,515,461—Merck—Process for Producing Streptomycin on Medium Containing Whole Yeast.
2,515,48.—Merck—Diacylated Pteroic Acid.
2,515,898—Lilly—Procaine Penicillin.
2,515,901—W. R. Warner—Condensation Products of Beta-Methyl Glutaconic Anhydride.
2,516,098—Parke, Davis—Biphenyls.
2,516,108—Ciba—2-Substituted Imidazolines.
2,516,153—Schering—Alpha-Beta Substituted Acirylic and propionic Acids and Esters.
2,516,206—Burroughs Wellcome—Serums Prepared in Presence of Phenol and Cresols.
2,516,216—Sharpe & Dohme—Thromboplastin containing NDGA as Stabilizer.
2,516,240, 2,516,251 — Merck — Penicillin related materials.
2,516,674—Wyeth-Substituted Glycinamide.
2,516,682—Squibb—Streptomycin Process.
2,517,410—G. D. Searle—Hydroxy Alkyl Xanthines.
2,517,576—Givaudan—Process for Making Alpha-Ionones.
2,517,651—Burnham Sol. Iodine Co.—Water disinfecting tablet.
2,517,760—W. S. Merrell—2-(p-Isothiocyano—benzenesulfonamido)—Pyrimidine.
2,517,800—Givaudan—Preparation of Alpha-Irones.
2,517,826—National Drug—Beta-(2-Benzo-thienyl)-Alpha-Amino Propionic Acid.
2,517,996—R. B. Parker—Hygienically Treating Bowlers' Hands.
2,518,123—C. Chavanon—Nonpyrogenic Medical Absorbent Wadding.
2,518,230—U. S. Vitamin Corp.—Aqueous Solutions of Lipoid-Soluble Vitamins.
2,518,262—D. R. Wilson—Permanent Waving of Long Hair.
2,518,510—U. S. A.—Stable, injectable penicillin composition.
2,518,667—G. de Boer—Hair Curler.
2,519,062—Nopco—Lotion Shampoo.
2,519,112—Abbott Labs.—Penicillin Salts of Amino Acid Esters of Sterols.
2,519,325—White Labs.—Antihistamines.
2,519,408—Schering—Antispasmodics.
2,519,411—Sterling Drug—Alpha-phenyl-alpha-(4 Quinolyl) acetonitriles.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2,519,450—Chattanooga Medicine Co.—Theophylline-Monaminobenzoic Acid-Alkali metal hydroxide Reaction Product.
2,519,462—Merck—Pantothenic Acid Intermediates.
2,519,469, 2,519,470—Merck—Vitamin B_6 Derivatives.
2,519,484—M. Levitz—Quinolyl Sulfonamides.
2,519,487—Merck—Multivitamin Preparation.
2,519,507—Merck—Pregnanes.
2,519,516—Borden—Recovery of Estrogens from Pregnancy Urine.
2,519,530—Merck Biotin Aliphatic Amides.
2,519,565—Bard-Parker Co.—Germicidal Composition comprising Formaldehyde and Hexachlorophene, for sterilization of surgical instruments.
2,519,639—C. A. Dixon—Permanent Hair-Waving Mechanism.
2,519,665—Colgate P. P.—Dentifrice flavoring material alkali metal salt of methyl salicylate.
2,519,720—Hoffmann-La Roche-Thiolactones Synthesis.
2,519,747—Onyx Oil & Chem. Co.—Detergent sanitizer, containing a quaternary ammonium compound, a non-ionic detergent and salts such as sodium carbonate and tetra-sodium pyrophosphate.
2,519,863—Eastman Kodak—Tocopherols.
2,519,902—G. Haller—Penicillin Solution.
2,520,015—Lilly—Acid addition salts of 1-cyclopentyl-2-methylamino-propane. Vasoconstrictors.
2,520,052—Reed & Carnrick—3, 4-Bis-(M-methyl-p-Hydroxyphenyl)-Hexane.
2,520,076—U. S. A.—Recovery of Globulins from Blood Plasmas.
2,520,098, 2,520,099—Commercial Solvents—Pure Crystalline Penicillin Salts.
2,520,127—U. S. A.—Rutin Purification.
2,520,143—Schering—Isolation of Stigmasterol.
2,520,153—Sterling—N-(Diarylmethyl)-Tertiary-Aminoalkanamides.
2,520m178-9—Sterling-Thiazolidones.
2,520,197—Merck—Hydrolysis of Streptomycin Hydrochloride.
2,520,264—Maltbie Labs—Substituted 3, 1-Benz-2, 3, 4, 5-Tetrahydrozepines.
2,520,331—Borden Co.—Anarcardicchloranachardic Reaction Products.
2,520,368—R. W. Landaw—Dispenser for Deodorants.
2,520,438—Eli Lilly—Bis (4-Aminophenyl)-Sulfone Ascorbate.
2,520,516—Wm. S. Merrell—Dicyclic Amines, Sympathomimetics.
2,520,630—N. T. Farinacci—Betaketo acids of the Cholenic Acid Series.
2,520,726—Armour & Co.—i-Cholesterylamalonic Acid.
2,520,908—U. S. A.—Methyl Esters of Subtilin.
2,520,980—National Chemical Products Pty.—Cosmetic cream containing a cholesteryl ether.
2,521,399—Hercules Powder—Terpineol from terpin hydrate.
2,521,544—Am. Cyanamid—Iodinating Amino Pyrimidines.
2,521,665—J. R. Geigy—Stilbene Disulfonic Acid Derivatives.
2,521,713—Sunshine Mining Co.—Microbicide Process.
2,521,758—Univ. of Toronto—Insoluble Penicillin Salts.
2,521,770—Merck—Selective Carbon Adsorption of Impurities from Acidic Streptomycin Solutions.

2,521,805—**Merck—Aconitine Extraction.**
2,521,809-10—**Merck—Acetamidomalonates and Acylamidoacetoacetic Ester.**
2,521,811-13—**U. S. Industrial Chemicals—Amine-Ester and Sulfhydryl Derivatives of Chloromethyl Dihydrosafrol Insecticides and Synergists for Pyrethrins.**
2,521,853—**Armour—Recovery of Lactalbumin.**
2,522,177-8—**G. D. Searle & Co.—16-Keto Estrogens.**
2,522,407—**Research Corp.—Physiologically-active Pyridoxines.**
2,522,831—**Chimie & Atomistique—Antibiotic with Thiouracil.**
2,522,854—**Merck—5,6-Dimethylbenzimidazole.**
2,522,858—**Chas. Pfizer & Co.—Hydrogenation of Streptomycin.**
2,523,245—**Distillers Co.—Streptomycin Process involves use of dihydrocarbon siloxane as anti-foamer.**
2,523,275—**Wyeth—Substituted Glycinamides.**
2,523,316—**Chesebrough Mfg. Co.—Ointment containing Bentonite.**
2,523,612—**Merck—Substituted Pyridones.**
2,523,621—**Merck—Substituted-b e t a, Beta-Dialkoxypropionic Acid.**
2,524,200—**Schenley Industries—Continuous Microbiological Process.**
2,524,219—**F. C. Bersworth—Germicidally Active Deionizing Agents for Alkaline pH Solutions.**
2,524,247—**Hoffmann-LaRoche—Aqueous solutions of Lipoid-Soluble Vitamins.**
2,524,266—**Y. I. Licastro—Hair Curler.**
2,524,643—**Maltbie Labs.—Anti-convulsants, 3-Phenyl-2-Piperidones.**
2,524,729—**Monsanto—Analgesics: 2-A m i n o-5-Benzyl-1,3,4-Thiadiazole and Acid Salts.**
2,524,799-802 and 2,525,320-22—**American Cyanamid—Hydroxy-benzenesulfonamido-imidazoles, heterocycles,-oxadiazoles,-pyridazines,-thiadiazoles,-and-isoxazoles.**
2,524,827—**Schering Corp.—Halogen-Substituted Polycyclic Aryl Aliphatic Acids.**
2,524,838—**Hoffman-LaRoche—Nicotinic Acid. Beta-Picolyl Esters.**
2,525,072—**Standard Oil Development—Chewing Dentifrices.**
2,525,231—**Hoffmann - LaRoche — 1,3,3-Trimethyl - 2,4-Dioxo Piperidine.**
2,525,674—**Upjohn—Beta-(Ortho-M e t h o x y) Phenyl-Isopropyl-2-Thenyl Alkyl Amines.**

Some Drug Industry Problems

(Continued from page 631)

the serious and convincing proof that between 1938 and 1949, the gross margin of retail drug stores remained at a standstill—at an average of approximately 32.5 per cent, whereas expenses of stores jumped from about 22.5 per cent to 26.5 per cent, reducing net profit from a high of 9.9 per cent to 5.9 per cent.

During all this period, the drug industry has been proudly publicizing that retail prices have risen only 3.1 per cent. With the seriousness of the gross profit problem, it is now apparent that there may have been false heroism in the drug industry's claim that inflation has not taken place in its stores. It is not difficult to imagine in the future if this margin remains the same

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The approach of a new Thanksgiving Day stirs nostaligia: In 1620, the history books tell, the Pilgrims landed on Plymouth Rock. And in 1950, the horse books tell, many New York cops will be splitting rocks for Thanksgiving.

•

The New York gambling expose is vigorous. The cops have been shaken up so thoroughly, two of them came out "Four" and "Three." So many officers have been taken out of plain clothes in full view of the public, it's positively embarrassing.

•

Thomas Murphy, the Hiss trial prosecutor now New York Police Commissioner, has gone from Perjury to Grand Jury. When New York's Mayor wanted a fearless Commissioner he chose a man with a walrus mustache in these days of high pressure shaving cream advertising.

•

Most amusing revelation concerned the police inspector who allegedly got a TV set from a gambler, then set it out for the garbage collector when he bought a new one. By now he should realize the fault with the old set wasn't mechanical but programmatic.

•

Prominent Thanksgiving celebrants should be Ezzard Charles, who convinced Joe Louis that Father Time's count of 35 is more conclusive than a referee's count of 10; the New York Yankees, who nearly beat the Phillies five games out of four; Ingrid Bergman, whose one bad movie discouraged the inquisitive press more effectively than a thousand stolen snapshots; and George Bernard Shaw, whose fractured hip attracted more attention than Lana Turner's perfect ones.

•

Although the Excise Tax wasn't removed by Congress, due to the Korean War, the Cosmetic Industry will still offer a vote of Thanks. As one manufacturer puts it: "With what's gonna happen with income tax, the 20% is just gonna look like an Exercise Tax."

George Fiedler

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and expenses continue to rise, what might happen to profits from drug retailing.

With mounting overheads and narrowing margins, druggists of America will soon begin to measure their operations in terms of gross profit dollars and not gross profit percentages. Abnormal percentages on slow moving items will not be nearly as interesting in the future, as retailers finally accept the doctrine that "fast nickels are better than slow dimes." Not only must the druggist of today start alerting himself to the contribution of products to his gross profit, based on their turn-over, but also he must become alert to the need for relief.

The situation in my opinion, is as critical as any single point that I could possibly mention. We are now in the fall of 1950, facing increased costs of advertising, increased costs of labor, rising operating costs. Unless we get relief through increase in gross profit, where can anyone suggest relief will come from? Unless the druggists of America get more gross profit dollars and cents through retail prices, where else will this increase in gross profit come from? Certainly not from arbitrarily raising prices and pricing themselves out of business in competition with other industries. It is my contention that the manufacturers of products exclusively distributed in the drug stores of America have the solution of this terrific problem in the palm of their hands. They are the ones that have prevented and avoided the same relief in the drug industry that has been given to others. Items today that are being sold in drug stores generally are being sold at the same price as ten, fifteen, twenty and twenty-five years ago.

One manufacturer just announced a price change which is the first since the end of World War 1. Let us suppose that the gross profit on this item was 15 cents per unit. The drug stores of America then have had this same 15 cents to meet their increased cost of doing business in 1950 as they had from that 15 cents in the previous years. It is almost ridiculous in its practical application. I could go on and mention category after category, including dentifrices, laxatives, pain relief preparations, patent medicines—in fact all of the import items in the drug and toilet goods business that are selling at exactly the same prices as they sold at ten and fifteen years ago with the same trade discount.

Isn't it absurd to have an industry with this type of operation in 1950, in contrast with the other industries where inflation has given the retailer relief? I contend that manufacturers whose products have been exclusively distributed through drug stores have thrived because of this great distribution inconvenience. Unless this relief is given to the retail druggist of America by the manufacturers, I contend that they will be "killing the goose that laid the golden egg."

This is not a plea or a crusade—it is only straight thinking. I am not urging concerted or over-all movement to arbitrarily raise prices to the consumer in contradiction of the Government's program. I am

only saying that there is a justification for consumers paying more for 100 aspirin tablets in 1950 than they did in 1925. There is justification for consumers paying more for a package of razor blades in 1950 than in 1925.

READERS' QUESTIONS

LIPSTICK BASES: We manufacture a lipstick paste and I have been comparing it with other products. Some of these lipsticks are very bright and ours is a little opaque. We will appreciate it if you will give us some idea how we can make our paste bright. Mexico.

I am not quite sure as to what you mean by lipstick "pastes," but I assume that you mean the lipstick bases. I do not feel that I can do justice to you by trying to explain all of the factors in making a bright lipstick in a letter. It is my thought that a text book such as "Modern Cosmetics" by Thomssen, will give considerable information. From this book I give you a method for making a lipstick base for light lipsticks:

White petrolatum	8½ lbs.
Paraffin (140° M.P.)	4¼ lbs.
Ceresin pure	1¼ lbs.
Carnauba wax	6 oz.
Anhydrous lanolin	1¼ lbs.

The color lakes, toners and perfume are mixed with the above base, which is ground in a paint mill and then cast into molds.

HAIR DRESSING: I am interested in making up a modern hair groom, (hair cream) and have experimented with different raw materials for that purpose and obtdined a satisfactory cream with lanolin absorption base, but lanolin does not produce a white cream, so I have decided to try with methyl cellulose and while the first experiments have not been so bad, I have not yet been successful enough as to produce the emulsion I have been looking for. Can you give me any advice or suggestions? Lisbon.

I think you may be able to solve some of your problems by using the following formula for a hair groom as a working basis:

Liquid petrolatum	25.0 parts
Alcohol	10.0 "
Methyl cellulose (4,000 cps.)	2.0 "
Distilled water	63.0 "

S. D. ALCOHOL: In a recent formula for skin freshener given in Drug & Cosmetic Industry, you suggested the use of alcohol S.D. 39B). Please inform me as to just what type of alcohol this is and where it can be obtained. New Haven.

S. D. refers to *specially denatured* alcohol, so treated as to permit industrial use without the tax imposed on pure alcohol. A number of specially denatured alcohol formulas are available, S. D. 39B being one example. Information on these specially denatured alcohols are available from your alcohol supplier.

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- Good fluffiness
- Perfume fixative
- Easy to blend and tint

CHEMICAL
- Essentially neutral
- Amphoteric
- Exceptional purity
- Deodorizes by neutralizing perspiration

PHYSIOLOGICAL
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- Screens out sunburn rays
- Bacteriostatic action
- Soothing
- Non-toxic
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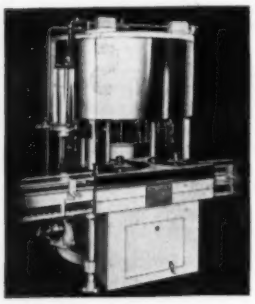

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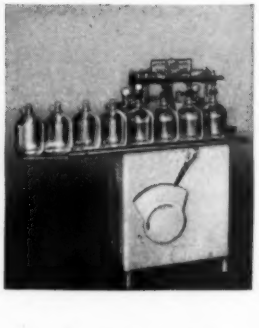

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Packaging Machinery Outlook

(*Continued from page 627*)

effect a substantial savings in materials that are in short supply. This factor is an extremely important point, for not only is the cost of the package reduced but one can produce just that many more packages from the amount of material available to him.

Every person in charge of packaging production should make it his first duty to keep completely informed on the latest developments in packaging machinery. The days are gone where in order to step up production a requisition is given to the personnel department to hire another eighty girls. This kind of labor is no longer available. If you intend to increase production today, you are going to do it with machinery and in most instances, automatic machinery. Study your production bottlenecks now and procure your equipment at the earliest possible time.

The FTC and Bromo-Seltzer

(*Continued from page 619*)

a change in FTC policy, we give in full the dissenting opinion of Commissioner Ayres:

"I cannot agree with the manner in which the Commission has disposed of this proceeding. The reasons for my disagreement are of such nature that it seems appropriate to state them on the record. This I do with reluctance and with full deference to the views and convictions of my colleagues.

"In January 1943 the Commission issued its amended complaint charging respondent with false and misleading advertising in connection with its medicinal preparation 'Bromo Seltzer.' The charge of principal importance is based upon the allegation that the improper use of Bromo Seltzer may be dangerous. The amended complaint alleges, among other things:

" 'Its continued use in a quantity exceeding the recommended dose, or with a greater frequency than the recommended frequency, may cause dependence upon the drug, skin eruptions, mental derangement and collapse, and its administration to children may be dangerous and injurious to their health.'

"The product is offered for the relief of headaches and other pains, and the amended complaint alleges:

" 'The palliative effect of respondent's product does not extend over a period exceeding four hours for each prescribed dose. Because of those facts, the usual and customary condition in cases of persistent headache or other pain is and will be that there will exist a tendency for the sufferer to take more frequent and larger doses than prescribed. Such increased use will in itself tend to cause headache, creating a tendency to take additional and more frequent doses. Respondent's advertisements contain no caution or warning against use of its product in greater amount or greater frequency than as stated on the label.'

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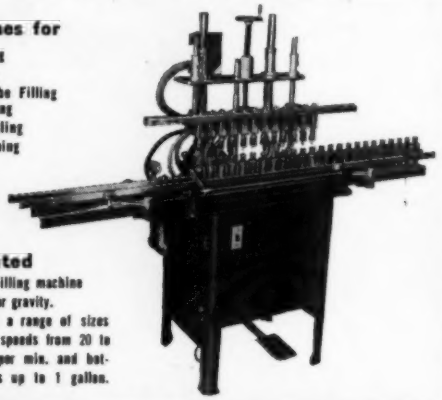

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"The complaint charged that through affirmative representations and through failure to reveal in advertising the dangers which may result from the improper use of the product, the respondent engaged in false and misleading advertising.

"Before issuance of the amended complaint, the respondent rejected the opportunity to correct its advertising voluntarily by the stipulation procedure. Since then the matter has been contested long and vigorously. Hearings were held beginning September 20, 1943 and ending August 13, 1948. The transcript of testimony covers more than 4000 pages and the record includes almost 200 documentary exhibits. On July 7, 1950 the Commission entered an order disposing of pending interlocutory motions. The case was then ready for presentation on the merits to the trial examiner for a recommended decision, and thereafter for presentation to the Commission on briefs and arguments for final decision on the merits.

"At this stage a stipulation and agreement was submitted by the respondent and accepted by the Commission and on that basis the complaint was dismissed without prejudice. I cannot agree with the Commission's action in thus disposing of the proceeding on a basis which does not give full effect to the record of evidence which is now available.

"If the record fails to support the allegations of the complaint, no remedy is warranted by agreement or otherwise, and the complaint should be dismissed. If, on the other hand, those allegations are supported, the remedy should be squarely in accord with the needs of the public interest as disclosed by the evidence and should be binding and enforceable. The provisions of the stipulation involved here, however, have not been weighed against the evidence in the record to determine whether or not they represent the full extent of the remedy needed.

"Although we have proceeded in this matter over a period of years and at great cost, the Commission has not determined the issues on the basis of the evidence which has been developed. On the contrary, it has accepted a stipulation and agreement which is not enforceable, and the violation of which would subject the respondent to nothing more than the possibility that this proceeding may be resumed or that a new proceeding may be instituted. Even so, however, I seriously doubt that strict compliance with the stipulation would materially affect the advertising which was challenged in the complaint or would afford any substantial protection to the consuming public. Such a settlement represents, in my opinion, an unwise substitute for orderly adjudication.

"In its published statement the Commission has announced that it is not its policy "to grant the privilege of settling cases through trade practice conference or stipulation agreements to persons who have violated the law where such violations involve * * * false advertisement of foods, drugs, devices or cosmetics which are inherently dangerous or where injury is probable;

* * *." The complaint alleges that the usual and customary condition in cases of persistent headache or other pain is and will be that there will exist a tendency for the sufferer to take more frequent or larger doses than prescribed, and that when the product is taken more frequently than recommended, serious injury may result. There has been no determination by the Commission that the record fails to support these allegations. On the basis of these allegations it appears that the product involved here is a drug which is dangerous and the use of which may result in injury. It is not the policy of the Commission to settle a case by stipulation when it involves the false advertising of such a product.

"On its face the remedy here is, in my opinion, also contrary to the published policy of the Commission. The effect of the stipulation is that respondent will not be required to disclose the dangers which may be inherent in its product provided its advertising contains the statement: 'Follow the label—avoid excessive use.' The Commission's statement of policy provides:

" 'In the case of advertisements of food, drugs, cosmetics or devices which are false because of failure to reveal facts material with respect to the consequences which may result from the use of the commodity, it is the policy of the Commission to proceed only when the resulting dangers may be serious or the public health may be impaired, and in such cases to require that appropriate disclosure of the facts be made in the advertising.'

"In this case the Commission has charged that the respondent's advertising is false because of failure to reveal facts material with respect to the consequences which may result from use of the commodity. If that charge is not justified there should be no requirement for disclosure in advertising concerning the dangers of the product. If, however, the charge is justified, disclosure is needed and it is the policy of the Commission to require "that appropriate disclosure of the facts be made in the advertising." The cautionary statement provided for in the stipulation fails to disclose any facts, and, in my opinion, is in direct contravention of the Commission's policy statement on this subject.

"It is further my opinion that any voluntary settlement of proceedings before the Commission should be consistent with previous action in similar cases. I shall make no effort here to review all instances in which the Commission has previously considered cases involving similar products. For present purposes it is sufficient to refer to the Commission's action in 1946 in Docket 4851, B. C. Remedy Company, and Docket 4855, Stanback Company, Ltd. Those proceedings were against products similar in their essential respects to the product involved here and the theory of the proceedings was substantialy the same. After evidence in support of the complaints had been prevented in those matters, the respondents waived presentation of evidence in defense and offered to settle the matters without further litigation. Their offers and the resulting settlements were, however, in sharp contrast with the settlement which has been accepted in this matter.

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*Patents applied for by H. J. Hersey, Jr., and Pulverizing Machinery Company.

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"In those cases the respondents eliminated acetanilid and bromide, both of which are involved in the present proceeding, from the formulae of their respective products, and expressed a firm intention not to use either of those ingredients in their products again. They agreed that if they should ever use acetanilid or bromide in their products in the future the Commission "shall have the right, without further proceedings and upon the evidence now in the record in this proceeding, to make such findings as to the facts, conclusions drawn therefrom, and to issue such cease and desist order as it may deem wise and proper; and from which respondents agree that no appeal will be taken." On that basis the Commission suspended further action in those cases and closed them without prejudice.

"The disposition of those cases evidently recognizes the substance in these and in the present case of the Commission's charges and that there is evidence to support them. Those cases, in my opinion, commit this Commission to obtain a remedy in the present case as full and effective as can be supported by the record. What that may be can be satisfactorily determined only by presentation of the case to the Commission in regular course for final decision on the record.

"It is not sufficient to say that the respondents in the earlier cases can be put in status quo by being relieved of the conditions of the settlements in those cases. They made fundamental changes in their products by removing the dangerous ingredients, and have since built their advertising and good will on the new products. These were major changes, doubtless at great cost, for which the Commission was responsible. They were changes, however, which, in the light of the present action, were unnecessary. If the record here supported the action which has been taken, no one could reasonably be heard to complain. It seems most unfortunate, however, for the Commission voluntarily to take such action, with its probable effect upon the broad competitive situation, without testing it by full and judicial appraisal of the record in this proceeding.

"I am anxious that needless delays in bringing proceedings to a conclusion should be avoided. My objection here is not to the fact of settlement, but is based upon my opinion that the settlement which has been made in this case is contrary to Commission policy, that at best it will have no binding effect and cannot be enforced in the event of violation, and that it is clearly inconsistent with previous action by the Commission in similar matters."

Eye Make-Up

(*Continued from page 625*)

increased in the cream, since they may consist of hydrocarbons with which the soaps are immiscible in the anhydrous cake, but which may be easily brought into an emulsion system. Amorphous substances such as ozokerite could therefore be used to advantage both as a water repellent agency and because of the increased adhesiveness its incorporation would give the

film. If the present trend towards greater accent on the eyes continues, I would therefore expect that the cream would become the more popular because actually it is possible to formulate a better functional mascara in a cream rather than in the anhydrous cake form.

The shades of mascaras are usually limited to the brown, blue, red and black. These shades are easily attained by using mixtures of the various ochres and red oxides, while one or several of the various carbon blacks, such as ivory black and lamp black, are used for the black and ultramarine blue for the blue. All mascaras are designed to accentuate the eyes by making the eyelashes appear larger or more highly colored. The amount of the preparation needed in any one application is dependent on the needs of the individual consumer. The preparation therefore must be designed so that it may be applied heavily or lightly as desired with equal ease.

Eyeshadows are used to color the eyelid and therefore may be applied only in thin films. The amount of color incorporated in the vehicle is therefore relatively large with a good preparation being a covering agent such as titanium oxide or zinc oxide. Colors are usually blue, black, brown, grey and violet. As in mascaras the pigments are limited by law to those already mentioned. The different colors may be attained from ultramarine for blue, carbon black for black and iron oxides for browns. Violet may be achieved by making the ultramarine blue with red oxides and grey by adding a higher concentration of titanium oxide to ultramarine blue. The character of the shade may further be controlled by addition of small quantities of carbon black.

The vehicle into which the colors are ground may be a mixture of ozokerite mineral oil and petrolatum or other similar non-aqueous bases such as beeswax and petrolatum or even some hydrogenated fatty glycerides. The filler contents run a good deal higher in this type of preparation than in mascaras, somewhere in the neighborhood of 35 per cent. The addition of covering agents is also recommended to permit better reflection of the color after application since the pigments by themselves are not good opacifiers.

In common practice the colors are mixed into the molten vehicle and then ground through a rollermill or ointmentmill. The mass is then remelted and restirred and poured into their containers. In many cases, however, the high filler content makes it difficult to pour and filling is accomplished by hand spatulation into the container.

Eye shadows are probably the least used of the eye preparations and therefore are usually included in most lines to make it complete. Certainly not because it represents any source of large profits.

Eyebrow pencils are in somewhat larger demand, but the material is made almost exclusively by the pencil companies, since they have the equipment and the know-how for better enabling them to incorporate the pencil rod in a wooden cylinder. The eyebrow pencil is formulated on much the same lines as the

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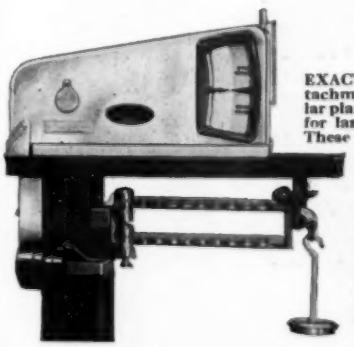

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eye-shadow except that the final wax pigment mixture is harder, though not as hard as a writing pencil, but soft enough for a film to come off with gentle rubbing. The rods are extruded rather than molded in the processing. Colors are usually the same as the mascaras.

Expanding Role of Antihistaminics

(Continued from page 621)

Because of this local analgesic action, orally administered antihistaminics are capable of causing an unpleasant numbness in the mouth. This fact, plus the bitter taste of most antihistaminics, forms the basis of Tapley's[8] advice that tablets or capsules should be swallowed whole and not chewed. To avoid nausea, these drugs should be taken with, or after, foods.

Oral medication is readily absorbed and is effective.[6] In addition to the usual tablets and capsules, so-called "delayed-action" tablets have been made available during the last year. A special tablet coating delays the antihistaminic's action for several hours, thus providing night-long relief of susceptible symptoms when taken with a regular tablet at bed time. A number of antihistaminic preparations are now available in elixir or syrup form designed particularly for children.

Some antihistaminics may also be given by injection. However, Burrage[6] warns that intravenous administration is seldom a recommended procedure since toxic reactions are more frequent and severe when this method is employed. He also points out that antihistaminic drugs may be used topically in the eyes, in the nose, on the skin or by aerosol administration.

Some of the most important uses for the antihistaminics lie in their ability to control many cases of drug allergy. Their use frequently makes it possible for sensitive patients to benefit from the newer and more potent drugs. In some cases the use of an antihistaminic almost amounts to a life-saving measure. Allergic reactions to medicinal agents, like sera, the antibiotics, sulfonamides, barbiturates, liver extract and insulin, often make the continued use of these valuable drugs difficult or inadvisable.

A check of the literature of recent months indicates how useful the antihistaminics have become. Rouse,[9] for example, recommended their use in the prevention and treatment of severe penicillin and other drug reactions. In England, Bignall and Crofton[10] found antihistaminic drugs relieved the vomiting and nausea caused by streptomycin. When, in the treatment of tuberculosis, vomiting occurred from the administration of sodium para-aminosalicylate, an antihistaminic agent was given to control this symptom.[11]

A few months ago, Skwirsky[12] observed that antihistaminic drugs are "a valuable therapeutic adjuvant in insulin hypersensitiveness." Last year, Finch[13] reported that the nausea and vomiting induced by synthetic estrogens can be cured or prevented by an anthihistaminic agent.

Various dermatoses, of both allergic and non-allergic

types, respond favorably to antihistaminics.[14,15] For example, Kasten[16] reported that an orally administered antihistaminic was beneficial in the treatment of approximately 68 per cent of patients with allergic and other itching dermatoses. The drug completely relieved or controlled the symptoms in 65 per cent of patients with urticaria, in approximately 60 per cent with allergic eczema, in 40 per cent with dermatitis venenata, and in 75 per cent with pruritus.

These agents are of particular value in skin conditions associated with severe itching. Thus, Frankfeldt[17] found that the administration of an antihistaminic will control itching in the majority of patients with pruritus ani. By reducing sleeplessness, the morale and general health of the afflicted person improves. Since the trauma of itching is removed, the pathological condition of the skin improves, and adequate therapy can be instituted. Silverman[18] similarly found that the severe itching of chickenpox, which had resisted other forms of treatment, may be relieved with the oral administration of antihistaminics.

Dispensed in creams, ointments and lotions, these drugs are finding frequent use in the topical therapy of various itching and irritant dermatoses.[19-23] These topical preparations are often of value in controlling chronic itching, atopic eczema, lichen chronicus simplex, contact dermatitis pruritus vulvae, pruritus ani, senile pruritus and in the urticaria of allergic dermatosis.[24] Such products have proved their worth during the summer months to alleviate the all too common itching and pain of poison ivy[25,26,27] and insect bites.[28,29]

In a consideration of oral versus topical administration of antihistiminic drugs, Waldriff and his associates[30] reported that urticaria responded satisfactorily to all the drugs administered orally. However, the results from local application of the antihistaminic preparations were generally superior to those following the internal administration of the drugs in the therapy of both localized and disseminated neurodermatitis (atopic eczema). Relief of pruritus was obtained in 56 per cent of all patients with cutaneous disease when the drugs were given by mouth, but the proportion was considerably higher—78 per cent—when the agents were applied locally. The local applications were "strikingly more effective" than oral administration of the drug in the therapy of the anogenital pruritides.

Moynahan[31] has observed that the creams and ointments containing antihistaminics are usually well tolerated, both by children and adults. The creams, particularly if they are of the vanishing type, penetrate quickly. However, they may not be tolerated by the skin in cases which show considerable vesiculation or blister formation. Ointments, though slower-acting, are often tolerated when the creams are not. It has been noted[3] that the antihistaminic creams or ointments can often be combined advantageously with tar or other medicaments for topical application.

Lotions containing antihistaminics are also of value in the treatment of various skin conditions. Using glycerine as the vehicle for the drug, Zondelk and

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Brombeig[32] obtained good results in the treatment of pruritus vulvae. Relief or improvement was observed not only in cases due to allergy, but also in those attributed to diabetes, vitamin deficiency or vulvovaginal infections.

Recently a pleasantly-scented, flesh-colored calamine type lotion containing an antihistaminic, camphor and glycerine, has been made available. It is indicated[33] for the relief of a number of conditions such as sunburn, windburn, poison ivy, poison oak, insect bites, bee stings and other minor skin irritations. It is also suggested as useful for diaper rash, prickly heat and the like.

A good deal of interest has been aroused in the potentialities of topically applied antihistaminics in the treatment of fungus infections of the skin. Two years ago, carrier and his colleagues[30] reported that much comfort results from the use of an antihistaminic ointment in fungus infections. More recently, Carson and Campbell[34] stated that a number of cases of athlete's foot had responded "dramatically" to an antihistaminic cream. Investigations of several such agents showed that their activities are not limited to the alleviation of allergic symptoms incited by the fungi, but that they are also inhibitory to these organisms. Further large-scale studies of this phase of utility are under way.[35]

Interest has also been shown in reports pointing to the value of the antihistaminics in the treatment and prevention of sunburn. Oral administration of such drugs has afforded relief in a number of cases of sunburn.[36,37] Other investigations[38,39] indicates that certain antihistaminics are capable of preventing sunburn when applied in ointments. Also pertinent are studies[40,41] which show that ointments of this sort are useful for protecting the skin and preventing erythema during irradiation therapy.

Particularly important is the oval administration of antihistaminics to prevent irradiation sickness following the therapeutic use of X-rays or radium. In 18 cases of irradiation sickness, clinicians[42] were able to report improvement and relief of such symptoms as anorexia, nausea, vomiting, weakness and headache following the administration of an antihistaminic. Using another drug with antihistaminic properties in a series of 83 patients who had developed varying degrees of radiation sickness, one group of workers[43] obtained excellent results in 25.6 per cent, good results in 53.7 per cent, fair results in 4 per cent and poor results in 13 per cent.

British investigators,[44] however, reported that the administration of an antihistaminic during irradiation with X-rays produces a toxic erythema in some cases and may also give rise to a profound constitutional upset. They believe that the use of these agents may interfere with the body's protective mechanism, thus accounting for the marked effects which they noted.

Indicative, too, are the findings of Green and Klein[45] concerning the value of orally administered antihistaminics for varicose ulcers. After good results in a

patient with an ulcer that had resisted all local applications, they decided to try the drug in other cases. Cure of the ulcer followed in severe cases, with two more still under treatment at the time of their report.

Further expansion of the role of antihistaminics is seen in the treatment of certain disorders of the nervous system. A number of reports[46,47] indicate that these drugs are valuable adjuncts in the treatment of Parkinson's disease (paralysis agitans, shaking palsy), a chronic disorder of the central nervous system. For example, following a study of 18 cases, Yoss[48] concluded that such a drug may be of value in instances of the disease which do not respond to the usual therapeutic agents. Effron and Denker,[49] however, found in a clinical evaluation that best results in the treatment of Parkinsonism were obtained with combinations of antihistaminics and scopolamine or Artane (a synthetic antispasmodic).

Italian studies[50] have suggested the possibility that certain antihistaminics may be of value in the treatment of epilepsy; giving results superior to those obtained with phenobarbital. Other investigations,[51] however, indicate that these agents must be used with case in patients with convulsive disorders, since they are capable of inducing seizures in such disorders.

Also worth noting is a report[52] on the value of an antihistaminic in the treatment of a case of encephalitis. In a detailed report, Horton and Brennan[53] described the relief obtained with such agents in a case of trigeminal neuralgia in which the attacks of pain followed a definite seasonal pattern. Very interesting are the favorable results obtained by Bryant[54] in five of six cases of manic depressive psychosis following the use of an antihistaminic drug during the manic phase of the mental disorder.

Certain types of headache have responded to the administration of these agents. Because of the histamine element in many cases of migraine, it should be expected that histamine antagonists would prove effective in treating this condition. However, Levin and Moss[3] have said that, on the whole, the antihistaminic drugs are "very disappointing" for migraine. In contrast, in discussing the therapy of histaminic cephalgia or migraine, Butler and Thomas[55] state that, in patients treated with antihistaminic preparations, the results are "most gratifying." In France, Biro[56] reported that the antihistaminic be prescribed is as effective as ergotamine tartrate in arresting attacks of migraine in patients in whom such an attack could be elicited by injecting histamine. Of eleven patents treated with this agent, nine remained free from attacks, and the attacks became less frequent in the other two.

Quite significant is Shannon's[57] report on the usefulness of an antihistaminic drug in the prevention of headaches following the induction of spinal anesthesia. Prior to the use of this drug, the incidence of spinol headache was 9.4 per cent, but in the patients given the antihistaminic, the over-all incidence of headache fell to 1.7 per cent.

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rhinitis and colds, the antihistaminics give promise of being helpful in treating a number of respiratory tract disorders. For example, there is laboratory evidence[58] that an agent of this class exerted a beneficial effect on the course of experimental tuberculosis in guinea pigs. In clinical studies,[59] the antihistaminic drugs gave encouraging results in the treatment of human tuberculoses. In the 30 cases investigated, the greatest improvement occurred in patients with tuberculous pneumonia and other active exudative lesions.

In one of those "accidental" observations, Helman[60] found that an antihistaminic could be useful in the symptomatic treatment of whooping cough. After prescribing such a preparation for a child with angioneurotic edema and whooping cough, he noted that there was relief of both conditions. He tried the preparation, an elixir, on four other children and found the whoop was greatly reduced in frequency and intensity, the improvement lasting only as long as the medication was given.

A recently introduced nasal solution has been described[24] as containing a synergistic combination of an antihistaminic and a vasoconstrictor. It is indicated for use in alleviating the symptoms of sinusitis, common colds, allergic rhinitis and vasomotor rhinitis.

A similar combination of antihistaminic and vasoconstrictor drugs was used effectively by Nemeth[61] in eye drops for the treatment of various types of allergic eye disorders. Indeed, Stocker[62] feels that there is a wide field for the use of antihistaminic drugs in ophthalmology. He finds that their usefulness does not seem to be confined to strictly allergic conditions or where the presence of histamine has been definitely proved. In addition to their topical use in many external eye conditions, these drugs may be useful systemically in treating certain intra-ocular diseases.

Otologists are also finding uses for the antihistaminics. Campbell,[63] for example, found that an antihistaminic drug was capable of reducing vestibular reactions following the fenestration operation for otosclerosis. This drug, as well as a related antihistaminic, has found important use in the prevention of various forms of motion sickness, which is, of course, essentially a vestibular disturbance. These agents have been discussed in some detail in a review[64] on motion sickness appearing in the September, 1950 issue of *Drug and Cosmetic Industry*.

Motion sickness, with its symptoms of nausea and vomiting, leads naturally into a consideration of the role of antihistaminics in gastro-intestinal disorders. These agents have proved to be frequently effective in controlling the nausea and vomiting of pregnancy[8,13]. In Dongray's[65] series 83 per cent of women were cured of these unpleasant complications by the use of such agents. Four per cent showed inprovement and only 12 per cent failed to respond.

Noteworthy, too, is the fact that in a number of cases of peptic ulcer, antihistaminics have afforded considerable, sometimes complete, relief of symp-

toms.[66,67] In a series of cases of chronic, edematous, erosive gastritis that had resisted other treatments, Cattan and Frumusan[68] administered an antihistaminic and procured rapid and lasting recovery. Following the chance observation by an alert mother, Siung[69] was able to institute a new method, based on antihistaminics, for treating oxyuriasis or threadworms in children.

In passing it may be mentioned that an antihistaminic provided rapid relief in a case of ulcerative stomatitis.[70]

In the field of gyneology, surprisingly good results have been obtained in the treatment of dysmenorrhea by the administration of histamine antagonists[71,72,73]. Basing their treatment on the theory that acute nephritis is an allergic response to bacterial toxins, urologists[8,74] have used antihistaminics with promising results, in the therapy of this disease. Of related interest is Hoffmans[75] view, based on preliminary observations, that there is some value in the use of an antihistaminic drug in pregnant women with a rise in blood pressure, albuminuria, or a combination of both symptoms.

Various other reports indicate the growing scope of utility for the antihistaminics. Naide,[76] for example, found an agent of this class was quite effective in relieving nocturnal leg cramps. He noted that it could be employed in cases where quinidine sulfate was either ineffective or not suitable. In other instances, it has been reported[77,78] that antihistaminics are valuable adjuncts for modifying or controlling the undesired effects of curare, which has attained an important place in surgery and other phases of medicine.

Of course many other papers have been published during recent years. In the meantime new uses for the antihistaminics are being applied in laboratories and clinics all over the world.

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(Continued on page 722)

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(*Continued from page 721*)

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Solidifying Point of Petrolatum

(*Continued from page 629*)

mometer bulb is slightly below the surface of the petrolatum. Place the assembly into the metal jacket. The water level in the bath shall be at least 1″ above the surface of the sample. Test for fluidity by carefully

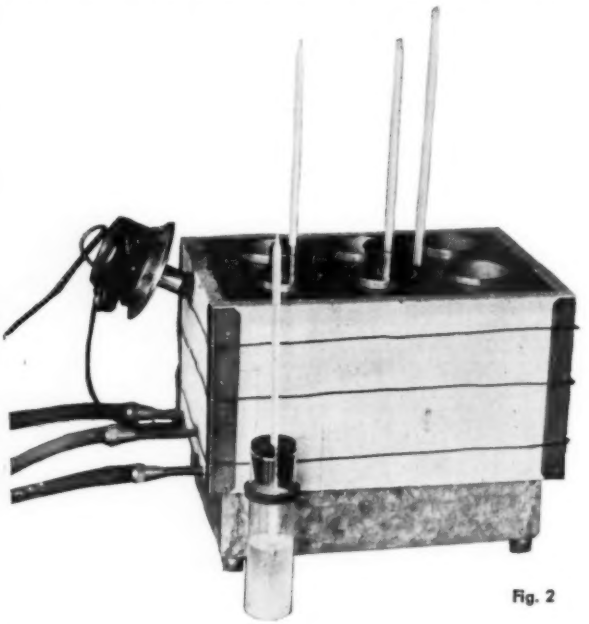

Fig. 2

withdrawing and tilting the jar from time to time. As soon as the sample does not flow when the jar is tilted, the latter shall be held in a horizontal position for 5 seconds. If the sample then shows any movement

the test jar shall be returned to the bath and the test continued. The temperature at which no movement of the sample occurs is the Solidifying Point. When the temperature of the sample is within 5°F of the expected Solidifying Point, tests for fluidity shall be taken at 1°F intervals. Maximum deviation from the mean should not be greater than 1°F.

Experimental Data

Various samples of petrolatums of different origins and differing physical properties were tested by the melting point methods described in the preceding paragraph (Table 1).

TABLE I

Comparison of Various Melting Point Methods

Petrolatum Sample	Saybolt Visc @ 210°F secs	ASTM Penetration D937-47T	ASTM D127-30	Melting Point, °F Saybolt	Ubbelohde	ASTM Congealing Point D938-47T	Solidifying Point
A	55	235	122	117	110	114	94
B	55	232	115	104	100	102	94
C	65	193	127	121	112	118	106
D	58	210	119	113	107	109	106
E	75	190	115	108	100	103	101
F	66	180	123	118	111	113	101
G	66	180	121	117	112	115	112
H	65	178	127	121	115	118	112
I	57	175	142	137	130	136	132

The data in Table 1 show the wide variation in results obtained by the commonly used melting point methods, and the results are independent of other physical properties such as viscosity or penetration. The American Society for Testing Materials have recognized that the ASTM D-127 melting point yields unduly high results, and they have recently developed the Congealing Point method which they recommend for testing pharmaceutical petrolatums. Even the Congealing Point, however, does not give a true picture of the petrolatum in many cases. For example, Petrolatum A has a Congealing Point of 114°F, but it was found that this petrolatum could be poured from one beaker to another after it had been kept at 95°F overnight. On the other hand, the Solidifying Point yielded results which corresponded with the actual behavior of the petrolatum. The Solidifying Point has the added advantages of simplicity, good reproducibility and requires the fewest manipulations by the operator.

Summary

Since petrolatum does not have a unique melting point, and since the methods for determining the melting point now in use do not in many cases predict the behavior of the petrolatum from the consumer's viewpoint, a method has been developed which duplicates conditions of use and therefore gives results which are identical with those obtained in actual practice. The procedure is a modification of the ASTM Pour Point Method and is designated as the Solidifying Point.

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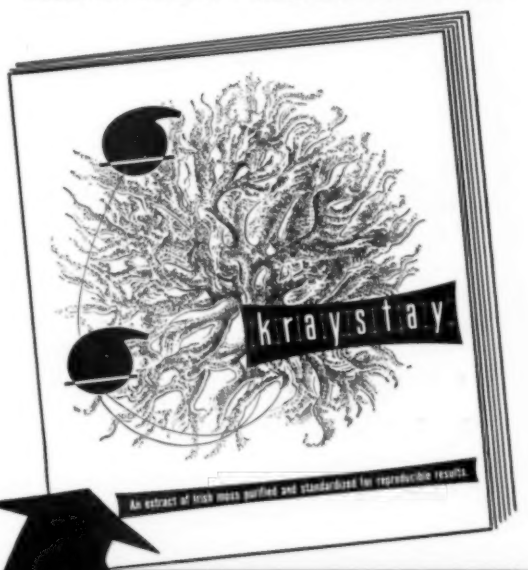

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Pension Plans for Employees

(*Continued from page 633*)

ment. Usually the "normal" retirement age is 65. A lower "normal" retirement age of 60 is sometimes set for women.

What about the amount of pension? Should it be (1) a flat amount, (2) fixed amount of percentage of income multiplied by years of service, (3) the amount purchaseable through an insurance policy with contributions on hand, or (4) the sum of percentages of various portions of the employee's average income.

In the matter of financing the pension plan management must carefully evaluate the issue. It must ask itself if the plan will be financed by the employer alone or jointly by employer and employees. In contributory pension plans it is quite common for the employer to match the employees' contributions; sometimes the employer not only matches the employee's contributions but in addition provides a pension covering the employee's service before the date of establishment of the system, and therefore before the employee's contributions begin.

If a contributory plan is to be adopted, should employees contribute say, 2 percent of monthly earnings up to $300 and 5 per cent of any amount exceeding $300, with the employer paying the remainder of the cost?

What about the administration of a pension plan? What about the effective date of the pension plan?

The fact that pension plans are becoming increasingly significant in this industry, management must understand many things to work out one. Pension planning is "Dream money" to thousands of workers in this industry, consequently, how will your management figure it out?

Since the basic legal issue has been setled by citation of the foregoing court ruling, it behooves management to take time out now and evaluate the problem, instead of waiting for a labor union to make demands.

Workers have come to think that social security pay for old-age does not provide a full answer. Thus, the changing pattern of pensions concerns both employer and employee in any industry for obvious reasons. Moreover, there are many reasons why a broadening out of pension planning in this particular industry will take place.

Pension plans for employees is a serious problem for management, and it is not without pitfalls. It has been said that pension plans for employees are a key factor to better labor-management relationship. Management should make full use of this theory. The solution is obvious, yet it is not easily arrived at.

The Social Security Administration believes that a comprehensive contributory social insurance system should be financed in part through a Government contribution as well as the contributions of employers and employees.

The reasons are not hard to find that management must give careful attention to pension plans for employees. If it is to eliminate and/or minimize outside

influence it is desirable that the "free enterprisers" in this industry solve its private programs. If a pension plan is demanded by a labor union, an employer in the industry cannot ignore it because the Taft-Hartley Act requires that employers must bargain in good faith whenever a demand is made by a union for pensions.

It follows, then, that any demand for pensions cannot be brushed aside by an employer these days when high-pressure is being exerted for the adoption of pension plans. Management must therefore, gather necessary data and make careful research and analysis on how, what and why a pension plan should be installed. Further, drug management should explain to its workers the story of the private pension plan.

There may be danger and costly implications in delaying adoption of a pension plan by management. Think of the possible amount of money that may be saved by working one out now instead of a year later? Think of the amount of trouble management will save by installing one now instead of waiting for a union to demand one a year later?

In closing, the matter of pension plans for employees calls for careful thought by management in this industry. In other words, drug and cosmetic employers might ask themselves these questions: Will a pension plan increase the quantity of production? Will a pension plan reduce labor turnover? Will a pension plan promote better understanding of company policies? Will a pension plan increase labor-management co-operation? Will a pension plan improve plant morale?

In other words, drug and cosmetic management will know by such reaction whether and why it should develop a pension plan program. Also, how pension plans should be carried on.

In any event, management should seek legal assistance because it can be very helpful throughout the development and installation and administration of a pension plan. Further, management will want to seek other expert advice, such as source information from the Treasury Pension Division, Wage and Hour Division, Life Insurance agents, and pension consultants, inasmuch as there is no substitute for professional advice.

In the light of the foregoing legal decision it would appear that the issue has been settled, that is, bargaining over pension plans. Hence, drug and cosmetic management should give real urgency to the need for understanding all aspects of pension planning for obvious reasons thereof.

Has your management a blueprint for pension? Private pensions in this industry may be closer than you think. In any event, drug management should not wait until it is forced to adopt a pension plan. Rather, it should gather all available facts and data and analyze same, because employee pension plans call for careful thought. In other words, pension planning is a complex issue, thus involving a host of legal, tax, accounting, labor relations, economic, financial, statistical, insurance etc. information.

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